Tribal Architecture in Northeast India

Tribal Architecture in Northeast India

By
René Kolkman
and
Stuart Blackburn

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Cover illustration: (*front*) Zeme Naga male dormitory (*hangseuki*), Boro Haflong (P. 043), 1996; (*back*) Crossing a cane bridge, near Kabu, 1998.

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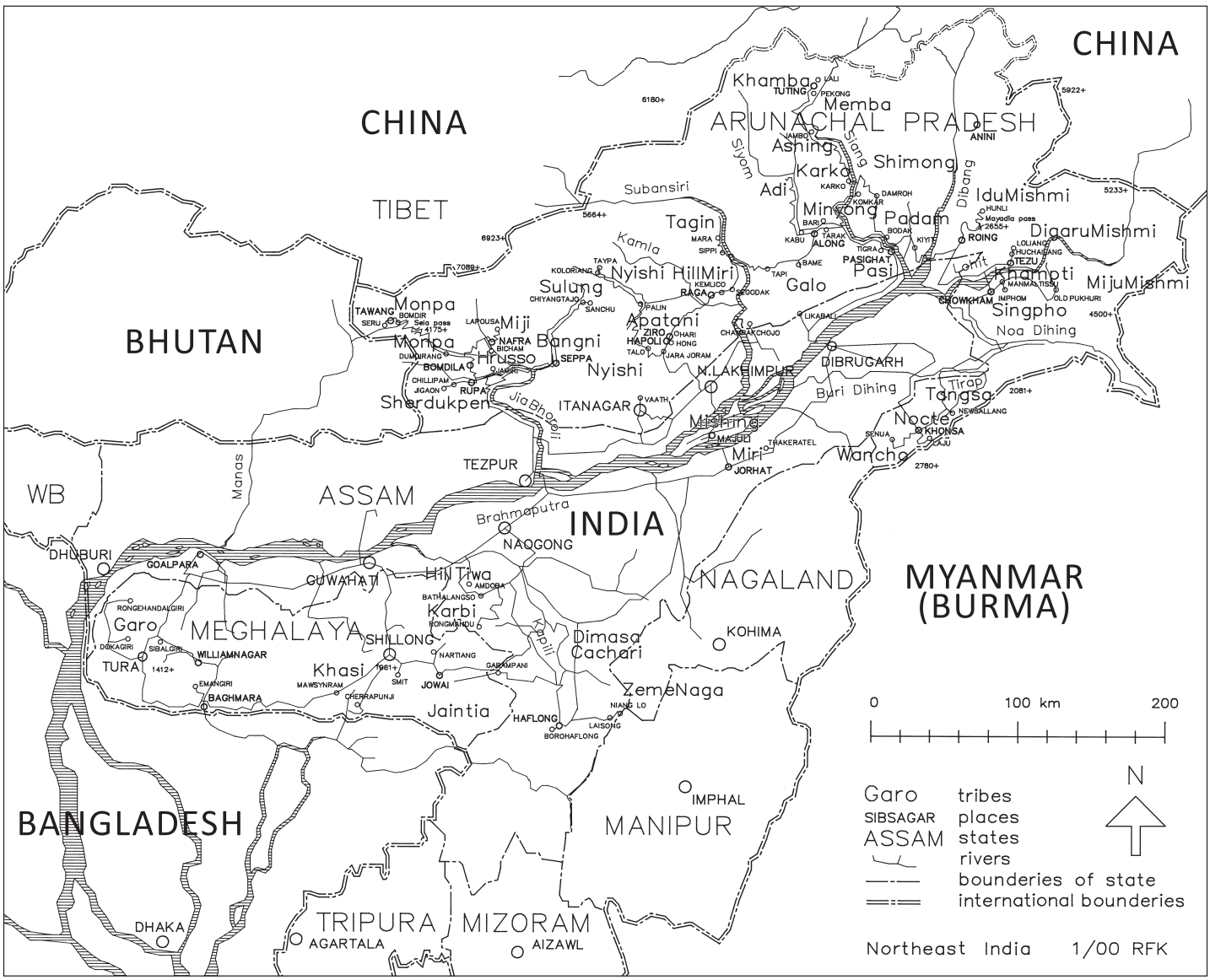
CHINA
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Miri
Sulung
Monpa
Miji
Bangni
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Apatani
Nyishi
Sherdukpen
Galo
Pasi
IduMishmi
DigaruMishmi
Khampti
MijuMishmi
Singpho
Noa Dihing
DIBRUGARH
N.LAKHIMPUR
ITANAGAR
Mishing
Miri
Tangsa
Nocte
Wancho
TEZPUR
WB
ASSAM
INDIA
NAOGONG
DHUBURI
GOALPARA
GUWAHATI
Hill Tiwa
Karbi
Garo
MEGHALAYA
SHILLONG
Khasi
Jaintia
Dimasa Cachari
NAGALAND
KOHIMA
ZemeNaga
MYANMAR (BURMA)
IMPHAL
MANIPUR
BANGLADESH
DHAKA
TRIPURA
AGARTALA
MIZORAM
AIZAWL
Subansiri
Kamla
Siyom
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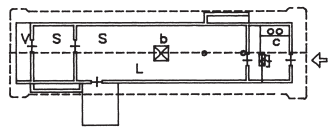

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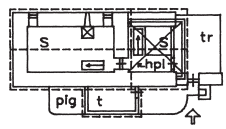

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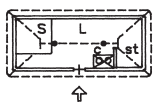

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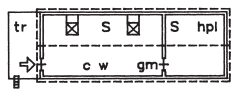

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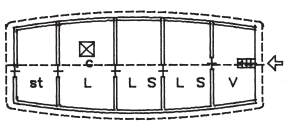

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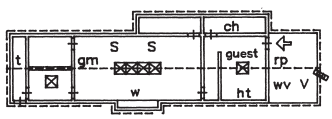

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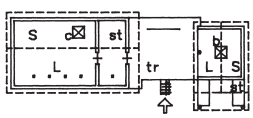

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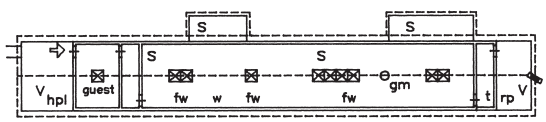

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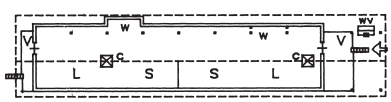

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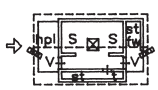

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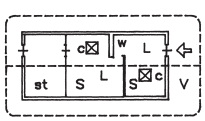

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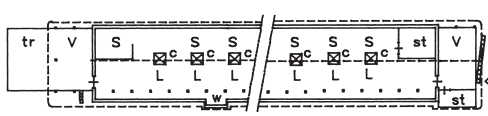

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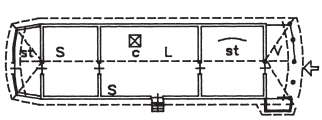

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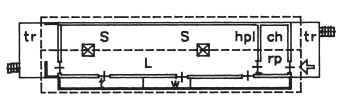

Apatani

legend:

- ⇦ = entrance
- L = living
- S = sleeping
- tr = terrace
- V = veranda
- hpl = holy place/altar
- ht = hunt trophies
- st = storage
- fw = firewood
- wv = weaving
- ⊠ = fireplace
- c = cooking
- b = ricebeer
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- rp = rice pounding
- w = water
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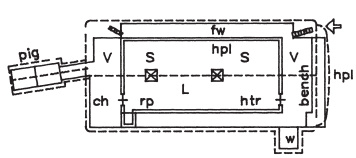
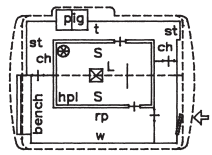
- gm = grinding mill



Hill Miri

composite drawing: comparison of traditional house-plans
ASSAM — MEGHALAYA — ARUNACHAL PRADESH
René Kolkman architect Amsterdam CD-a



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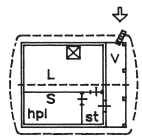

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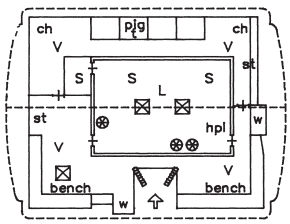

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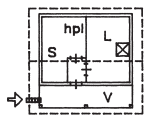

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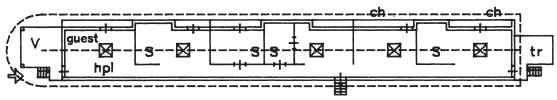

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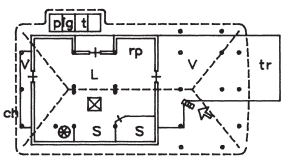

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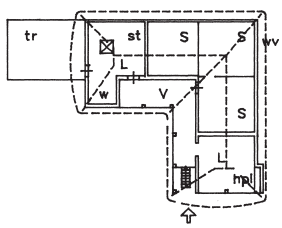

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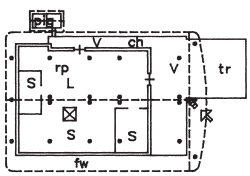

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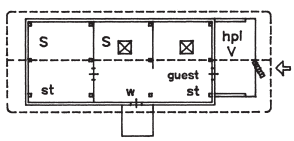

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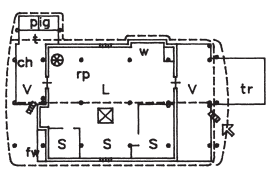
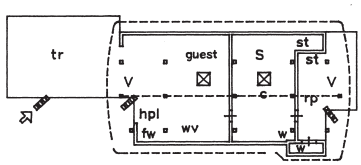


Padam



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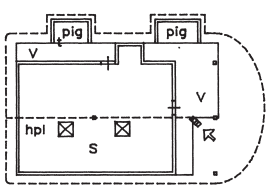

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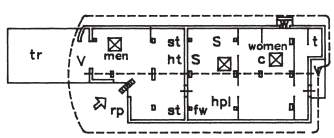

Nocte

legend:

- ⇦ = entrance
- L = living
- S = sleeping
- tr = terrace
- V = veranda
- hpl = holy place/altar
- ht = hunt trophies
- st = storage
- fw = firewood
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- pig = pig sty
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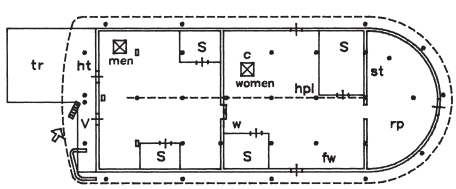

Wancho

composite drawing: comparison of traditional house-plans
ASSAM — MEGHALAYA — ARUNACHAL PRADESH
René Kolkman architect Amsterdam CD-b

GLOSSARY

collar-beam	horizontal beam connecting two opposite rafters
construction	main structure of beams and columns that keeps a building together and upright
crown post	post standing on tie-beam, supporting the ridge
floor cover	top layer of the floor
frame	structure of studs and rails to support panels or a wall cover
ground-plan	horizontal shape and partition of the building
hipped roof	roof with planes sloping down on four sides
jhum	method of cultivation that involves periodic clearing of land by cutting and burning trees and undergrowth (slash-and-burn)
joint	junction of building parts
lath	long, thin piece of wood or bamboo
mithun	semi-domesticated bovine (*Bos frontalis*)
panelling	filling in of a frame with studs and rails
partition	division of a building into different spaces, such as rooms and verandas
platform	raised wooden or bamboo floor on piles
plinth	raised earthen level under the house, or only under the walls of the house
porch	roofed entrance
purlin	horizontal roof beam supporting rafters
rack	structure hanging above a fireplace, for storing gourds, utensils, food (esp. meat) and sometimes firewood
rafter	inclined beam supporting the roof
ridge	roof top
ridged roof	roof of two planes with ridge
roof cover	top layer of roof
shore	slanting beam that keeps the construction upright
spar	pole, rafter, round wooden column or beam
terrace	outside part of a raised platform, without roof
thatch	type of roof cover, such as jungle grass or palm leaves
tie-beam	beam connecting the supporting columns, to keep the construction together
tree-trunk staircase	tree trunk with cut steps
veranda	roofed gallery along one or more sides of a building

INTRODUCTION

This is a unique book, the result of a singular curiosity about the tribal architecture of northeast India combined with the expertise and patience required to document it in detail. Its ethnic breadth (37 distinct groups are covered), depth of documentation (houses, granaries, ritual structures, settlement patterns) and method of presentation (hand drawings of floor plans, sections and side views, as well as photographs) make this a valuable addition to our knowledge of traditional architecture worldwide and of tribal cultures in northeast India in particular.

The principal author, René Kolkman, is an architect (now retired) based in Amsterdam. From his private office, he designed and directed in particular the building of several public government housing projects as well as restoration projects in the old quarter of Amsterdam.

Believing that architecture rests on fundamental principles, he was always interested in original and traditional buildings, especially those in tribal regions of India. In order to see those buildings first hand, he and his wife travelled to Assam and Meghalaya in 1996, to Arunachal Pradesh, Meghalaya and Assam in 1998 and again in 1999. Those research trips again reinforced his commitment to the basics of architecture.

In the tribal buildings in northeast India, he saw a purity of form (especially shape, partition, cohesion, spatial transition between inside and outside) and materials, a reciprocity between human needs and environmental possibilities. Local people have an impressive knowledge of the different types of mud and stone (used for foundations, and sometimes plinth and walls), the many varieties of wood and bamboo (for construction), the various kinds of cane (for joints), and the several grasses, rice stalks or palm leaves (for thatching). Good and different examples of this local knowledge at work are the detailing of walls in Garo houses (P. 001 and P. 007) and Sherdukpen houses (D. 044), the construction of a Zeme Naga dormitory (D. 027) and Zeme Naga house (D. 032), a Tagin house (D. 066) and a Wancho house (D. 102).

Overall, tribal architecture is practical. In wet climates with a wide range of temperatures, the house interior is kept dry, cool and clean. The overhanging, thick thatched roofs keep out rain but retain heat from the hearths. The floors, either raised on piles or on mud plinths, are safe from ground moisture, while the walls allow ventilation. Smoke from the open fireplaces is drawn out through the roof, drying and sterilising the meat and gourds stored in racks above the fireplaces and also drying the roof construction and covering.

Thinking as an architect, rather than an anthropologist, René Kolkman decided to survey as many groups in the region as possible. This would produce a broad picture of the architecture of the region that would enable him (and others) to identify common features and differences among the 37 groups surveyed. To achieve this he had to work quickly, and so, again relying on his professional experience, he measured buildings by pacing (rather than a tape measure) and judging the proportions. This method revealed the basic plan, the central idea, behind the structure, and is also the method followed by the builders themselves.

Nevertheless, anyone who leafs through this book will see that it does not lack detail or precision. The hand drawings, and their annotations, contain a wealth of information beyond the exact number of feet and inches. Supplemented by photographs and commentaries, it brings us close to the places where the people of northeast India live their lives. As such, this book contributes new architectural knowledge to the anthropological study of place and space.

The Anthropology of Place and Space

Based on Paul Oliver's earlier estimate, there are now well over one billion dwellings in the world, and the overwhelming majority of them have been built (at least in part) by the people who live in them.[1] These traditional houses, their construction, shape, materials and use, represent a rich field of enquiry. And in many cases, they are objects of beauty.

The humble house now occupies a small but secure niche in the anthropology of place and space. Even so, anthropological research has focused more

[1] Oliver 1987: 15.

on transnational than domestic space, more on meaning than materials. This tendency is evident in the first proper anthropological study of the house. In 1881, Lewis Henry Morgan published a pioneering book analysing the links between houses, kinship system and social organisation among North American Indians. His innovative approach led (via Mauss, Durkheim and others) to Claude Lévi-Strauss' concept of 'house societies' almost exactly one hundred years later (Lévi-Strauss 1983: 171-76). 'House societies' is the Frenchman's term for a type of kinship system in a transitional society, moving from an egalitarian society to a hierarchical one, with the longhouse being the most obvious type of house in such a society.

From the 1970s onward, space and place became more central to anthropology, generating new terms such as 'inscribed space', 'gendered space', and 'embodied space.' As part of a broader movement toward processual and performative approaches, the spatial dimensions of culture emerged from an inert backdrop to a dynamic presence. Inhabited space and culture were now seen as part of a complex and dialogic process of creating meaning. Houses are inscribed with these deep cultural values, and they in turn reinforce those values in the people who inhabit them. In other words, space, like language, both constructs and reflects the cultural world. This complex interweaving of cause and effect between inhabited space and culture, like that between language and culture, is self-evident yet not easily demonstrated.

A good example is the influential study by James Fernandez of the architecture of houses and sacred structures among the Fang, Zulu and Mino societies in Africa. Linking these spatial patterns to mythology, cosmology and psychology, Fernandez describes these three cultures as, respectively, centrifugal, centripetal and centred. 'In the sacred places we have examined,' he writes in conclusion, 'we find men and women achieving emergent, qualitative status in which both inchoate men and women and inchoate space itself are given shape, character, and meaning.'[2]

A persistent shortcoming in the study of inhabited space derives from the dual nature of the house. Houses are adaptions to the environment— to available building materials and existing climatic conditions—and often involve innovative designs and building techniques. At the same time, houses represent complex cultural concepts. Houses, in short, are both functional and symbolic, a dualism that has generated a split between anthropological and architectural approaches. While anthropology tends to concentrate on ideology at the expense of object, architecture often underplays the social dimension in the precision of its material descriptions.

An excellent study of traditional houses in Southeast Asia (Waterson 1990) attempted to close this gap by focusing on the 'living house,' while others, notably Paul Oliver, have combined architectural and anthropological perspectives to foster a comparative and world-wide understanding of the inhabited and built environment (see Oliver 1987). Still, Oliver's research, while not ignoring the force of materials and environment, emphasises the ability of people to shape their dwelling and environment. Again the influence of Lévi-Strauss is evident in Oliver's analysis of the imprint of kinship on the Iban longhouse in Sarawak, a building not dissimilar to many in northeast India (Oliver 1987: 138-140). Even Waterson's fine book on the living house in Southeast Asia devotes only a handful of pages to its construction.

Houses as cosmologies, it appears, are more interesting to most social scientists than houses as physical objects. Although the house is often said to be a merger of 'the visible and the invisible,' the scholarly imagination has found more to feed on in the unseen realm.[3]

India and Its Northeast

The study of inhabited space in India and its northeast fits into the broader picture outlined above. The handful of descriptions of the traditional house in India (see, for example, Cooper and Dawson 1998) are dwarfed by those of temple, tomb, fort and mosque—not to mention the growing interest in colonial and empire architecture (exemplified by Metcalf 1984). Nor is this to be unexpected, given the impressive history of textual sources and monumental buildings in the subcontinent. After all, architecture is an ancient science in India, and Sanskrit contains the earliest explicit explanation of how a building replicates the cosmos (see Tillotson 1987).

Indeed, an entire village of bamboo dwellings would easily fit inside the courtyard of several of India's best-known temples. It may be a generalisation but not an exaggeration to say that the size of a building is a sign of wealth and status. Certainly royal patronage often produced great beauty, subtlety and imagination in these magnificent edifices, not least

[2] Fernandez 2006: 20.

[3] Couland 1982: 188.

in the images sculpted on their pillars, towers and walls. Anyone interested in aesthetic form would naturally be drawn to them rather than to a squat bamboo hut.

Anthropologists of India have not ignored the house, however, and most ethnographies duly include a description of settlement patterns and architecture, with a few paragraphs on gendered space and ritual uses.[4] Overall, however, there is far more on households than on houses.

Turning to the northeast region of India, the focus of the present book, we find a comparatively greater emphasis on the house, perhaps because ethnographies of tribes typically pay more attention to material culture than do studies of other populations. Not just family dwellings but also ritual spaces and sex-segregated dormitories, such as the Naga *morung*, drew the attention of outsiders from an early date. Over time, as the ethnography of India's northeast tribal cultures, principally the Nagas, played a disproportionate role in the development late nineteenth- and early twentieth-century anthropology, these buildings became widely known.

While notes and descriptions of houses among the tribes of the northeast appeared in print as early as the 1830s, the first attempt at an ethnographic analysis was printed in 1882, only a year after Morgan's well-known book (Peal 1882). And it generated a key question that is still debated today: Is the house an environmental adaptation or a cultural construct?

S.E. Peal, a tea planter and naturalist, began his article by observing that pile-houses are not, as is often said, an adaptation to uneven ground of the hills since they are also built in the plains. Using detailed drawings to illustrate his brief essay, Peal then suggested that this type of dwelling belonged to the culture of the pre-Aryan tribal inhabitants of the entire subcontinent. This idea was rejected by others (whose comments are summarised along with Peal's essay), who pointed out that the northeast tribes built not one but several types of houses and argued that house-types were the product of climatic conditions and not intrinsic to culture.

After that, and for much of the twentieth century, the study of tribal architecture in the northeast attracted little public or academic interest (for exceptions, see Roy 1960, Fürer-Haimendorf 1969, 1980). Only in the 1980s did Indian researchers begin to venture beyond the Brahmaputra River valley in any numbers. This new scholarly interest in the region was part of a broader shift in public debate generated by the formation of new states, national security concerns and continuing internal insurgencies, some of which were formalised in New Delhi's 'Look East Policy' in the 1990s. Academic knowledge also increased in this decade, when the region was opened up to international researchers. Now we began to get new data on these little-studied cultures, not just the well-known Nagas, but Adis, Apatanis, Garos, Singphos and many more.

As a result of publications and on-going research, we are gaining new information about tribal architecture in the northeast. Not just its place in material culture, but also its social, economic, ritual and aesthetic dimensions. A recent observation concerning the Nyishi longhouse in central Arunachal Pradesh, for instance, is generalisable to other (though hardly all) groups in the region: 'The primary social and economic unit is not so much the village as the longhouse comprising one to four or even five families, usually with a common lineage.'[5] As regards ritual space, the same study identified 22 different places within or around a Nyishi longhouse, each with a different type of spirit.[6] Turning to aesthetics, the carved and painted columns and doors of Naga houses and dormitories, including their log drums, have attracted scholarly attention since the 1830s. Now, despite the decline of these woodcarving traditions, we have more detailed descriptions of their iconography (see, for instance, Oppitz 2008).

In all of these areas, this book contributes new information. For example, we know that in many houses space is organised by age, gender and/or generation. Indeed, Oliver's summary statement about Iban longhouses in Sarawak applies in large part to many tribal house-types in northeast India: they 'are spatially differentiated along the length of the building on one side by apartments, in depth by functions and vertically by making spaces above and below accessory to the living level.'[7]

To this general picture, this book adds precise details about the sleeping areas reserved for men or the senior couple or guests, as well as information about the location of fireplaces used by women. It simi-

[4] On house architecture in Kerala, see Moore 1989. On traditional tribal architecture in north Bengal, see Chaudhuri 2004: 71-74; in northeast India, see Owen 1844: 8-10; Woodthorpe 1876: 65-68; Jacobs 1990:27-32; Aisher 2005 (chaps. 1 & 2) and Post 2007: 41-42; Cooper and Dawson 1998: 172-182.

[5] Aisher 2005: 100.

[6] Aisher 2005: 124-125.

[7] Oliver 1987: 140

larly contributes to our understanding of the complex dormitory system, in which unmarried boys and girls sleep in separate buildings. We learn also about the taboo on using iron in house-building, the way mortars are separated from the foundation of the floor, and the relationship between the patterns of a woven bamboo floor covering and social status.

Regarding symbolic representation, there is, as far we are aware, no concept in tribal northeast India that equates the house with the cosmos (as in Hinduism). Similarly, we are unaware of any foundation myth or culture hero story in which house-building plays a pivotal role. This absence may be compared with the prominence of house-building in the stories of the culture hero of another Tibeto-Burman tribal group in Nepal (see Ebert and Gaenszle 2008: 9).

Further, the house appears in only one of several hundred traditional stories told by northeast tribes to explain the origin of the world. In this Digaru Mishmi cosmogony, the earth is formed from the mud of a primeval ocean, but when a fire is lit to dry the water, everything burns. The original brother-sister pair then travel to the land of Sun-Moon to gather seeds with which to grow trees to build houses again (Elwin 1958: 24). Again, this relative absence stands in stark comparison with the dozens of stories in the region that explain the origins of the mithun, beads, the sun and other valued elements of the tribal word.

House-building, however, is ritualised in many of these cultures, typically through a complex series of divinations of eggs and chicken or pig livers that precede construction.[8] Construction is largely a communal activity, as it is elsewhere in the world, and usually the work not of a random group of people but members of the same kin (or fictive kin) group.

In this respect, northeast India both confirms and extends the notion of 'house-societies.' Whereas Lévi-Strauss, and others, conceive of the physical house as the embodiment of a kinship unit, house-building in the region is itself a re-enactment of kin relations. Indeed, the house-building and the house do not necessarily involve the same kin. Apatani houses, for example, are nuclear-family units, but they are built by a combination of close paternal kin and members of a fictive kin group (*ajin* or 'friend'). One of the primary obligations of *ajins* is to help each other build or more likely rebuild a house after a fire (see Blackburn 2010: 113-125).

[8] Shukla (1965), for example, provides an account of the rituals accompanying the construction of a Nyishi longhouse.

The relationship between house types and kinship structures among societies in northeast India is an exciting topic for future research. While that task is beyond the scope of this book (and the competence of its authors), it does provide the detailed documentation of traditional houses that will enable others to undertake such an analysis.

The idea of 'traditional' houses, of course, is something of a chimera, since they are never static. Nevertheless, this book presents the houses of tribal northeast India as they stood in the 1990s, when changes were already underway; and those changes—such as dormitories becoming community halls, longhouses shortened and separated sleeping spaces—are described in this book. Since the 1990s, tribal architecture has altered further, and traditional houses are even more difficult to find.

This book also contributes to the exploration of the complex relationship between architecture and culture. As noted earlier, others have shown how houses spatially reinforce specific cultural concepts and practices, and we will see examples in the following pages, too. While this book makes no explicit theoretical argument, the documentation and commentaries indicate that the house in tribal northeast India is a prominent marker of group membership.

Ethnic Groups

Although the tribal populations documented in this book are heterogeneous, it might be useful to point out a few common elements. For example, nearly all groups speak a Tibeto-Burman language; the only exceptions are Khasi, an Austro-Asiatic language, and Khampti, a Tai-Kadai language.

Certain types of ritual practices and beliefs are also widely shared, though in increasingly complex combinations. A core of animistic beliefs and shamanistic practices has for many centuries been augmented, modified or displaced by other religious systems. Tibetan Buddhism is influential in northwest and western Arunachal Pradesh, and Burmese Buddhism is found in southeast Arunachal Pradesh, notably among groups who migrated from Burma. Hinduism has influenced nearly all groups, but especially those in Assam and close to the border with the plains, while Christianity, particularly Baptism, but also Roman Catholicism and Methodism, has spread like wild fire in the region. Some groups have become almost entirely Christian, and a few are heavily Hinduised, but the most common situation is an

admixture and/or co-existence of animism, shamanism, Hinduism and Christianity.

Resistance to this loss of traditional religion has led to the formation of revivalist or reinvented religions, such as the Seng Khasi movement in Meghalaya, the Kacha-Kabui (now Zeliangrong) movement among Naga groups and the Donyi-Polo movement in central Arunachal Pradesh.

It should also be pointed out that population size varies greatly among these groups. Only one (Mishing) is over a million, two (Garo and Karbi) are over half a million, while most are in the 10,000-50,000 range, although several number less than 5,000.

Finally, any book about northeast India faces the problem of ethnic names: many have changed and are changing still, while some new ones are not universally accepted. For example, many Mijis now prefer the term 'Sajolong' or 'Dhammai,' and Sulungs increasingly use 'Puroik.' The Mishing in Assam used to be called 'Miri,' and some Mishing still use this name for themselves. Similarly, today most outsiders use 'Tiwa' for the 'Lalung,' although some of the people living in the hills refer to themselves as 'Hill Lalung.' Some terms, such as 'Tagin', 'Monpa' and 'Naga,' are administrative labels that conveniently but imprecisely gather diverse groups into a single category. Wherever possible, this book uses autonyms instead of exonyms (Nyishi instead of Dafla, Adi instead of Abor, Hrusso instead of Aka, and Bugun instead of Khowa), although readers should be aware that ethnic terms, both old and new, do not always identify a discrete population.

Organisation of this Book

Following this Introduction, the book documents the traditional architecture of 37 ethnic groups arranged by state (Meghalaya, Assam and Arunachal Pradesh).[9] Each group's section consists of a brief overview of its traditional architecture and a longer commentary, including stories and anecdotes recorded by René Kolkman during field work and illustrated by his drawings and photographs. A final chapter distils this information into a set of conclusions regarding core architectural elements, basic house-types, the relationship between house, environment and culture, and, lastly, the extent of change.

[9] Khasi and Jaintia architecture are covered in a single chapter.

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A. MEGHALAYA

GARO

Overview

Many of the traditional villages are situated on a hilltop or on a slope down toward a river, with houses often grouped around a central dancing/ritual space. Most Garo villages had and some still have a dormitory for unmarried boys/men (*nok-panthe*), a roofed but open construction meeting house (*kachari*), memorial posts (*kima*) and granaries at some distance from the village. Some also had a guestroom (*bandasal*). Tree-houses (*borang*) are built to watch over crops.

Traditional houses have three rooms, lined up behind each other in a row. The main room is the living room (*nok-ganchi*). The entrance room (with a fireplace for cooking) is on the ground level, but the living room and the sleeping room are on a platform, and the living room contains a hearth (for making rice beer), a centre post (abode of spirits) and a post with a liquor pot.

Wood and bamboo are the main construction materials, with wooden posts or standing stones to support the platform. Flattened and woven bamboo is used for the floor and walls, while the roof is thatched with jungle grass and palm leaf. The sliding door hangs on a bamboo rail.

In 1996 we saw the dormitory in villages only as a small house with a fenced garden. In 1999, the heavily Christian village of Emangiri had a large renovated house used merely as a community hall.

Commentary

Crossing over a narrow river on a bamboo bridge supported by stone pillars, we walked into the Garo village of Sibalgiri. Shadowed by trees, it lay at the foot of a mountain slope. The large bamboo houses stood partially on platforms, their roofs covered with thatch and palm leaves (P. 003).

We were invited into the house of the headman Mr Mizan (D. 001, D. 002 and P. 002). 'The village is more or less modernized, but not Christianised,' Mr Mizan explained. 'The dormitories and guesthouses have been taken down and there is no meetinghouse. But the tree houses still stand in the fields, not in the village. My own house is the traditional type. Come, I'll show you.'

The long rectangular house had three rooms: a front room on ground level, the main room and a sleeping room on a raised platform. Over a high threshold with stepping stones we entered the ground floor (*nokkra*), where Mr Mizan pointed out the kitchen fireplace, three hearths in a row, beautifully modelled in mud on the floor (P. 005). At the other side firewood was stored.

A short bamboo staircase led into a long central hall (the *nok-ganchi* proper) on a raised platform. Around its hearth guests were welcomed, and Mr Mizan added, 'in my house this is the meeting room for the village-council.' Opening the side door at the back, he continued, 'When too many people come, we have the meeting outside, on this terrace.'

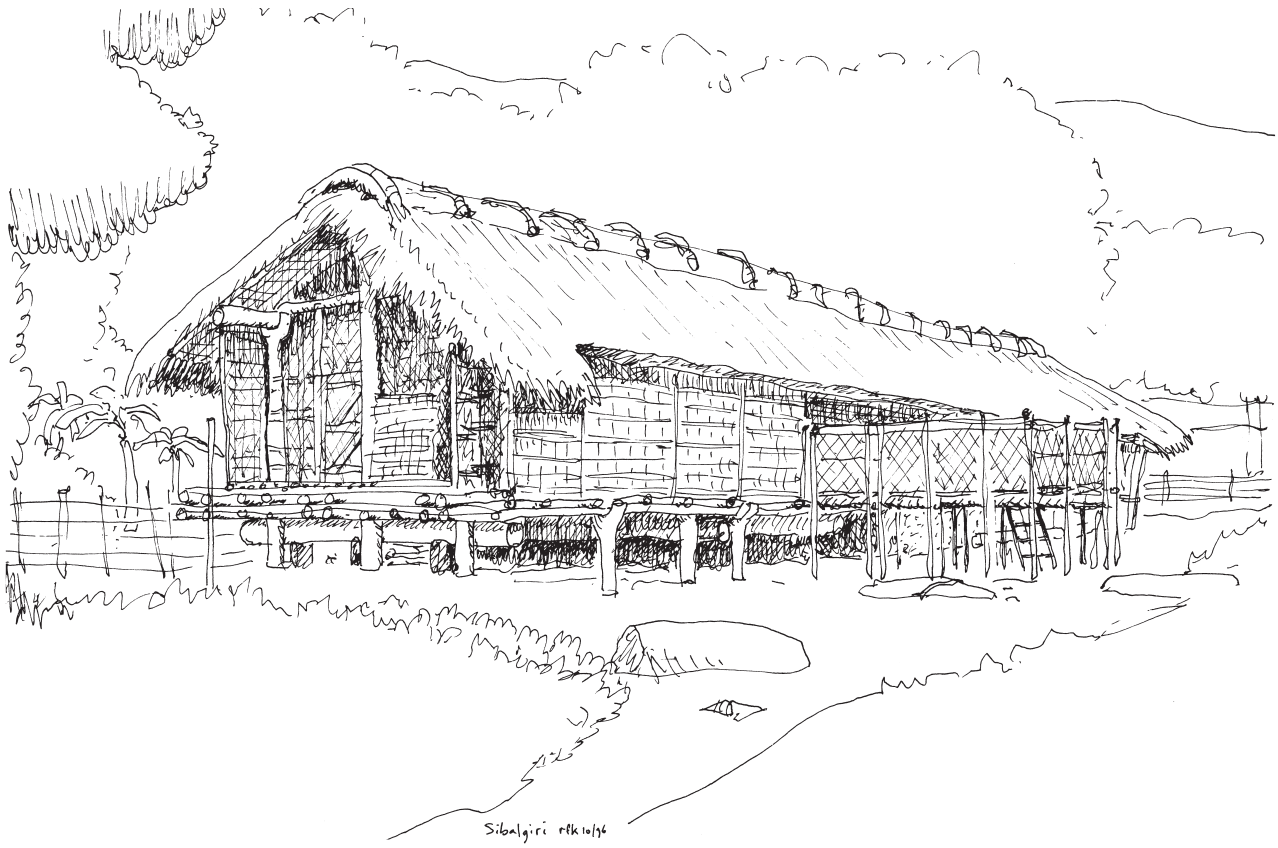
Entering the third room, the parents' bedroom (*nokdring*), we saw at the back a narrow veranda overlooking the backyard. We asked about children and Mr Mizan replied, 'The children sleep in the central room. Originally unmarried sons, 7 years and older, slept in the dormitory.'

Sitting on the woven, flattened bamboo floor around the fireplace in the large central room, we heard that 'food is prepared in the kitchen only and that the fireplace here is used exclusively for making beer.' The floor under the fireplace was made of tamped mud, surrounded by a wooden frame set into the bamboo floor. The rack above the fire, supported by four poles, is called *ongal*, where gourds, baskets and such things were stored and, sterilized by the smoke, had taken on a beautiful deep brown colour.

There were two special columns in the main room. The *maljuri* near the wall of the front-room was the place of the spirits, a sort of house shrine and place for sacrifices. The *chusimra* near the fireplace was the place for brewing drinks and for the large storage jar.

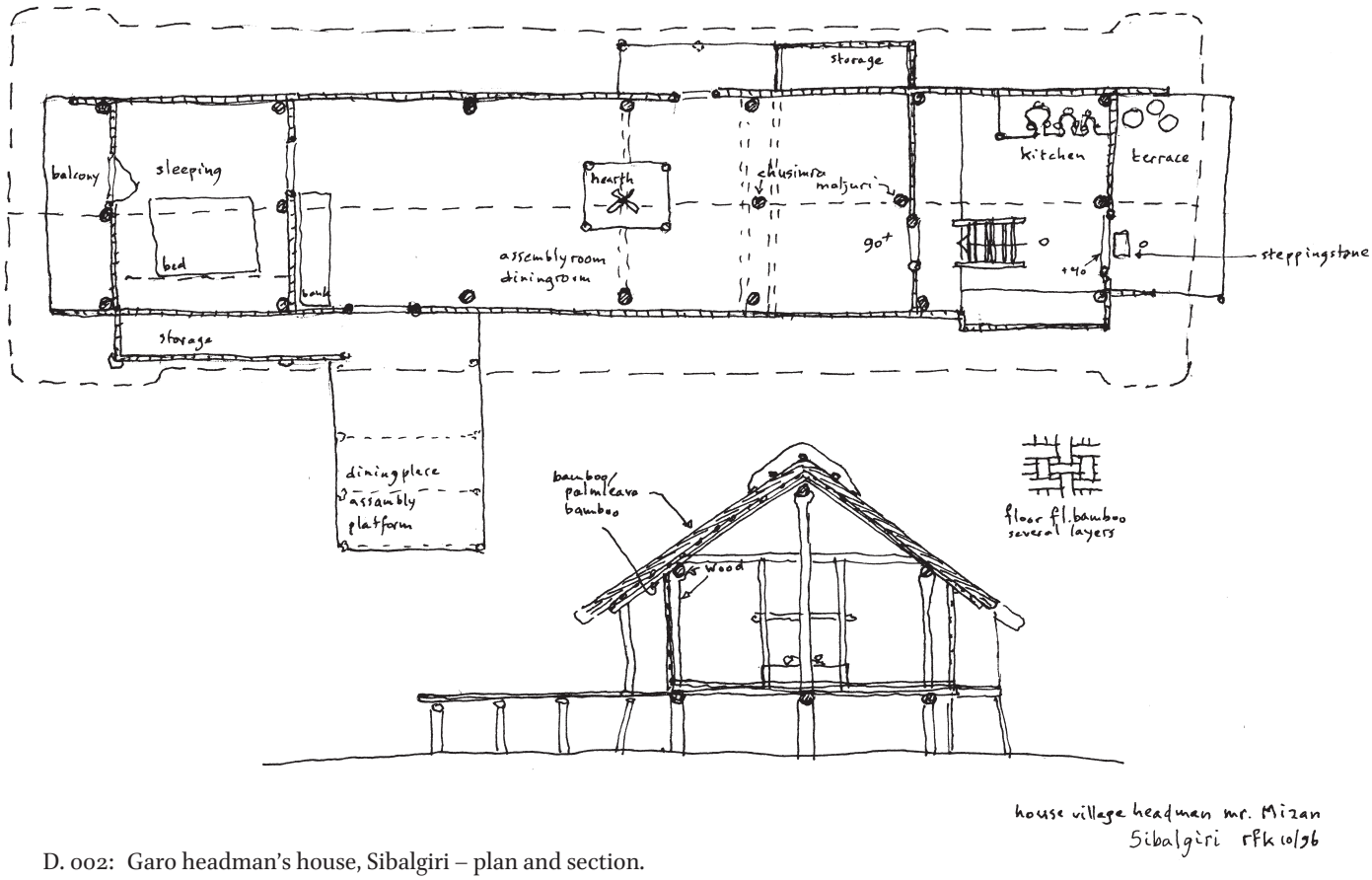
Against the wall of the parents' bedroom hung special knifes used for headhunting. Officially this practice had been forbidden a hundred years ago, but it seemed to have continued up to fifty years ago.

The main construction of the house, the circular central columns and the heavy roof and floor beams were made of wood. The supports of the raised floor were also made of wood or sometimes large standing



D. 001: Garo headman's house, Sibalgiri – view.

P. 001: Garo house, Dokagiri, 1996.



D. 002: Garo headman's house, Sibalgiri – plan and section.

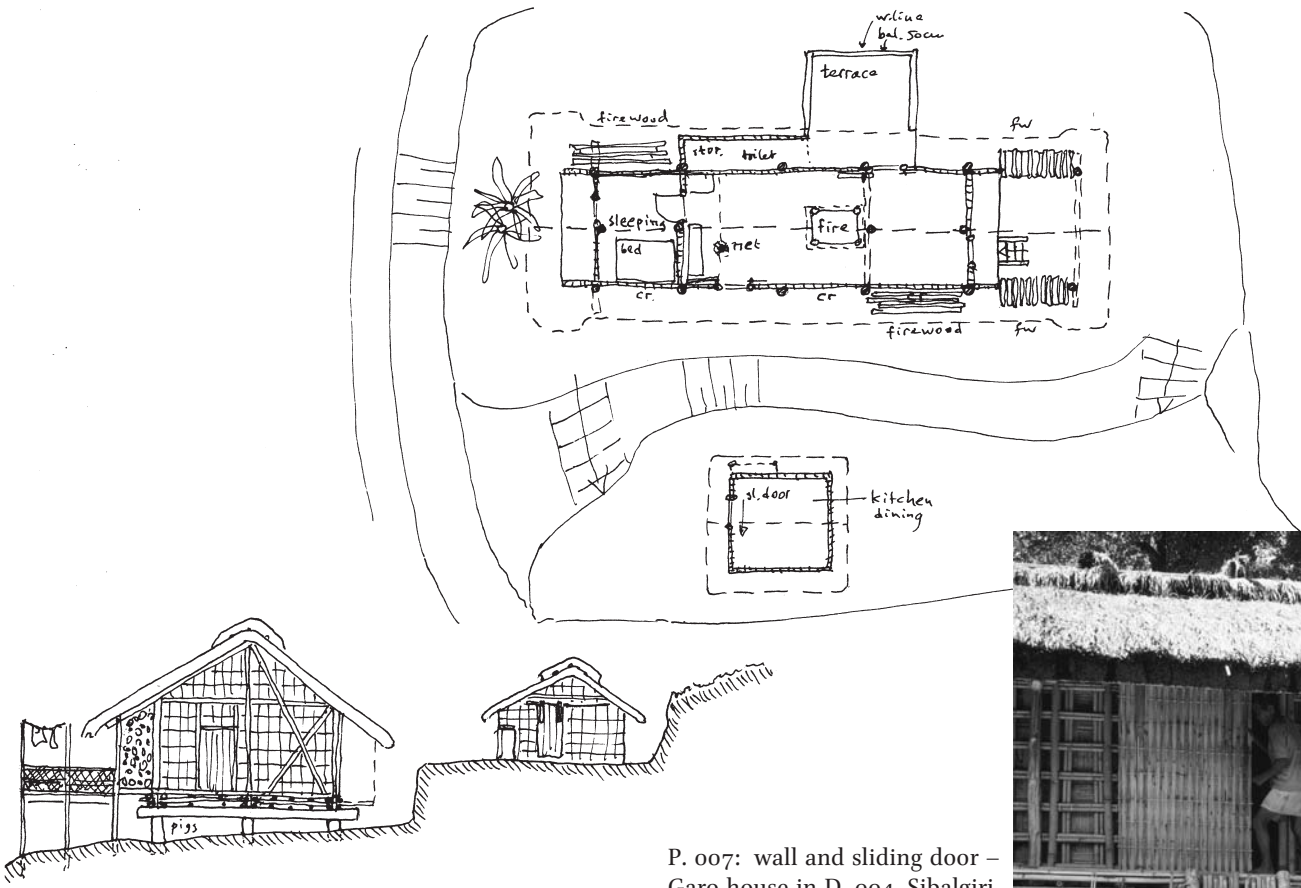
P. 002: Garo headman's house in D. 002, Sibalgiri, 1996.

P. 003: Garo house, Sibalgiri, 1996.

P. 004: interior of Garo headman's house, Dokagiri, 1996.

P. 005: interior, kitchen of Garo headman's house in D. 002, Sibalgiri, 1996.

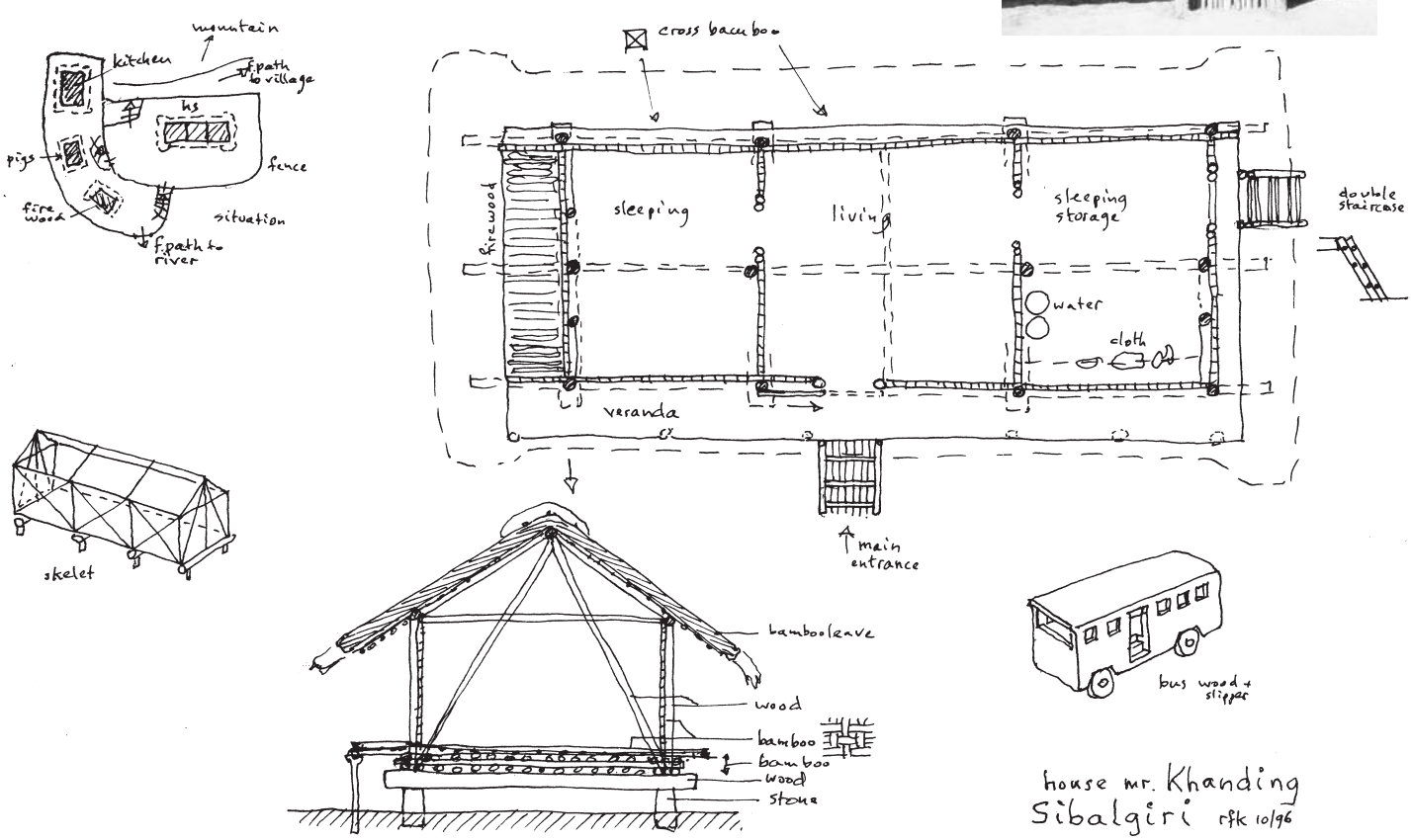
P. 006: playing children, Sibalgiri, 1996.



D. 003: Garo house, Sibalgiri – plan and view.

P. 007: wall and sliding door – Garo house in D. 004, Sibalgiri, 1996.

D. 004: Garo house, Sibalgiri – plan and section.



stone. The rest was mostly made of bamboo. On the floor beams lay a grid of two to three layers of thick bamboo, on top of which was a cover of woven bamboo which was springy to walk on.

The walls were made of bamboo framework with (where necessary) shores or crosses, all cleverly inserted through each other and covered with woven bamboo. On the roof beams, all separately supported (triangular roof constructions are not known), lay bamboo rafters and thatch laths.

The joins of the whole construction were made with cane, which was used to bind; no nails were used. The woven covers of floor and walls were made with flattened bamboo in strips about 10 centimetres wide. Freshly cut bamboo was split and flattened, and put in the sun to dry on the ground or hung over the roof.

The long, overhanging roof was covered with thatch, jungle grass and sometimes palm leaves. The roof corners extended even further. When the roof cover was jungle grass, the edges of the roof at the front and the back were often made with palm leaves. On top the ridge was strengthened by pieces of bamboo kept in place by bundles of straw. It was essentially the same type of house described in Alan Playfair's 1909 book on the Garos.

On our way to Boldakgiri the road went into the hills and jungle. On an open spot in a small field stood a beautiful *borang*, a tree-house on a platform. A long bamboo ladder led to the platform, which was supported half-way up by a cut tree fork and shores. The house was made of woven bamboo and the roof was thatched (for another example, see P. 017).

Walking along a muddy, slippery and steep footpath through the forest, we arrived at a small group of houses which made up Boldakgiri village. There were three houses, two traditional and one bungalow type. Going farther, we reached an open place with a second group of houses. One was a modernised type (D. 005), with three rooms and an entrance in the middle room. It had a thatched roof, flattened woven bamboo walls and floor, and a construction using spars and bamboo. Connections were made locally with iron bolts. A separate, free-standing kitchen had an eating space in back on raised platform, which extended out as a terrace.

Sitting on small stools in a circle, we talked with these nice people, who told us this house was a more modern type. The main difference to the traditional type was the division of the interior: you enter in the middle and can go left or right to another room, whereas in the traditional house in Sibalgiri you had to go through the first room to the second and to the third room. There was also no fireplace in the house and the kitchen, and cooking fireplace were in a separate building. But the building techniques and materials were mainly the same.

The footpath led to another village, Rongehandalgiri (D. 006). Around an open dancing place stood a number of platform-houses and some storage buildings. Here the kitchens were inside the main building; only the headman's house had a separate kitchen. One of the houses was different: it stood on a raised mud plinth and had bamboo walls covered with mud. The other houses were as described above in Boldakgiri, only here with inserted wood-joints tied with narrow cane strips in the traditional way. Probably this village is the original one and Boldakgiri is a modern extension of it. In addition to houses, here there were also two special buildings.

In the middle of the dancing place stood a *kachari*, a communal meeting house with a raised platform and roof, and no walls. Important meetings were held here with the village headman sitting in the middle, the others in a circle around.

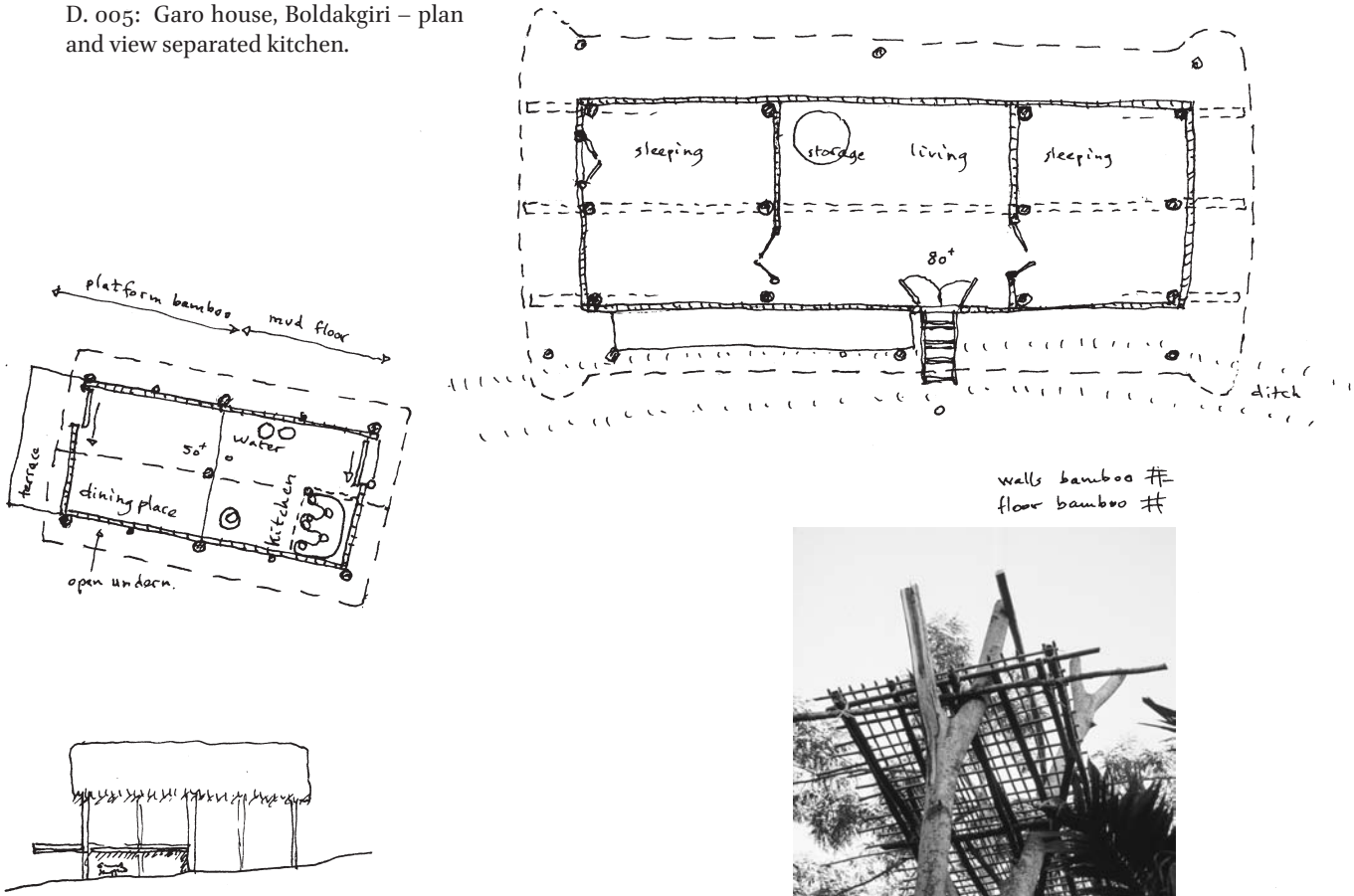
The second special house was a rather small *nokpanthe*, or young men's dormitory. Boys above the age of 8 to 10 slept here, and girls were not permitted to enter, in principle. This house was the only one in the village with a flower garden. When I joked, 'The boys do this of course to get the attention of the girls,' the village men (luckily) laughed loudly.

One of the village boys wanted to show us something and took us with him, deep into the forest. There a tree-house was being built. On top of two trees, which had been chopped down and without branches, a platform had been built at a height of about seven metres (P. 008). Floor cover, walls and roof were missing, so the floor construction was well visible. A grid of thin bamboo lay on major and crossing minor bamboo beams. A high ladder leaning against the floor construction was tied at the top. I climbed upwards, part way. The ladder was very secure, but Edith didn't want me to go higher. Just when I got down, she started to shriek; there was a big leech on her leg.

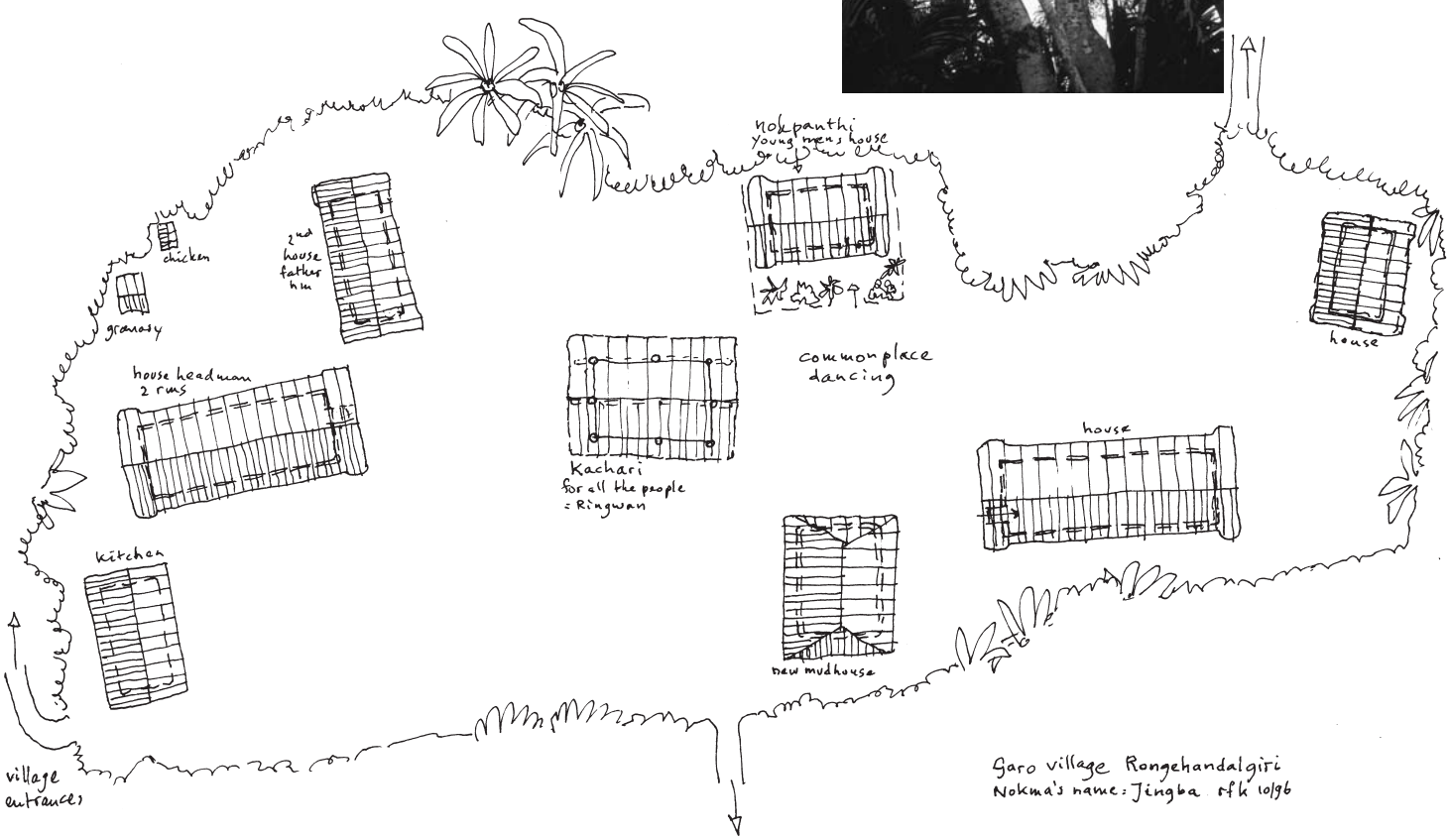
Dokagiri was really a cluster of several distinct villages. The first Dokagiri, the one nearest the road, had houses of the modern type: three rooms next to each other, entrance at the middle and free-standing kitchen. The houses were built on a platform, but not the kitchen. Nails and bolts were used for joining.

We were introduced to a meeting of three village headmen of three different Dokagiris. They all looked at us with interest, and we looked at them the same

D. 005: Garo house, Boldakgiri – plan and view separated kitchen.



P. 008: Garo tree-house (*borang*) under construction, Rongehandalgiri, 1996.



D. 006: Garo village plan, Rongehandalgiri.

way. They liked to be photographed. All three wore a bright white head cloth. The oldest, with earrings, a small moustache and goatee, had Chinese-looking features. The other two, with earrings but without moustache and goatee, had more rounded faces and more Tibetan features (P. 013 and P. 014).

The local headman invited to enter his house, which stood on stone blocks, with the upper building strengthened inside with cross beams. The kitchen was built on the ground, with poles dug into the earth. He had electricity from a cable that led from the road to the village. Sitting in the middle room and drinking tea, we looked around. The headman was supplied with modern apparatuses: TV, radio and cassette deck.

The second Dokagiri village lay on a hill top, surrounded by forest. We approached the village from below, as high above us rose the first houses on their tall poles. Climbing to the central dancing place, we looked at the circle of long houses and realised that this was really a very special village.

The houses were of the original type we saw in Sibalgiri, with the three rooms behind each other. The first one was on the ground level, while the other two on a platform were the living room with a fireplace and bedroom with a veranda. They all stood with front side and ground level entrance directed to the dancing place. The back stood on high poles on the slope (P. 001).

I made a drawing of the village plan (D. 007). In the middle of the dancing place was a sacrifice pole with forked trunk, and nearby stood the *kachari,* the communal meeting place (P. 012). Men with nothing else to do could gather together in the 'talk-house', as this building was called. Sitting here in the shadows, one could see and hear about everything that happened in the village. All columns and roof beams were covered with white hand prints, just as with the headman's house (P. 004). Even on the back of a passing woman we saw a white hand print.

At the other side of the meeting house was a group of ancestor images (*kimas*). They leaned against each other in a circle, wooden poles with vaguely carved heads, but the effect was nearly abstract (P. 009). When somebody dies, his or her image is put near the entry of his house and later is added to the others. In a corner of the central place stood a *delang* or shrine for the deceased (P. 016).

To the side of the dancing place stood a house with a flower garden, which was the young men's dormitory (P. 015). Here, just as in Orissa, local people were often a bit mysterious about the young men's house and acted as if it didn't exist. We heard this was because the government and especially the Christian mission had severe objections to such an institution—even suggesting it was a pit of fornication.

We were asked to come to the *nok-ganchi* house of the headman in another Dokagiri (Dokagiri IV), where men and boys of the orchestra were practising for the Wangala festival. Outside we heard the music, and inside it was dark and crowded with men making music and drinking rice beer. The shining eyes showed a lot had been drunk already. Again all the columns, beams and walls were decorated with white finger or hand prints.

The music was played on oblong drums, gongs and cymbals, two men blew a horn with long bamboo mouth-piece (*adil*) and one played a long bamboo cross flute (*bangsi*). The musicians kept practising in the *nok-ganchi*—maybe the ample rice beer was keeping them there. On the village square the public sat and waited patiently, not just for the music but for the dancing girls, too.

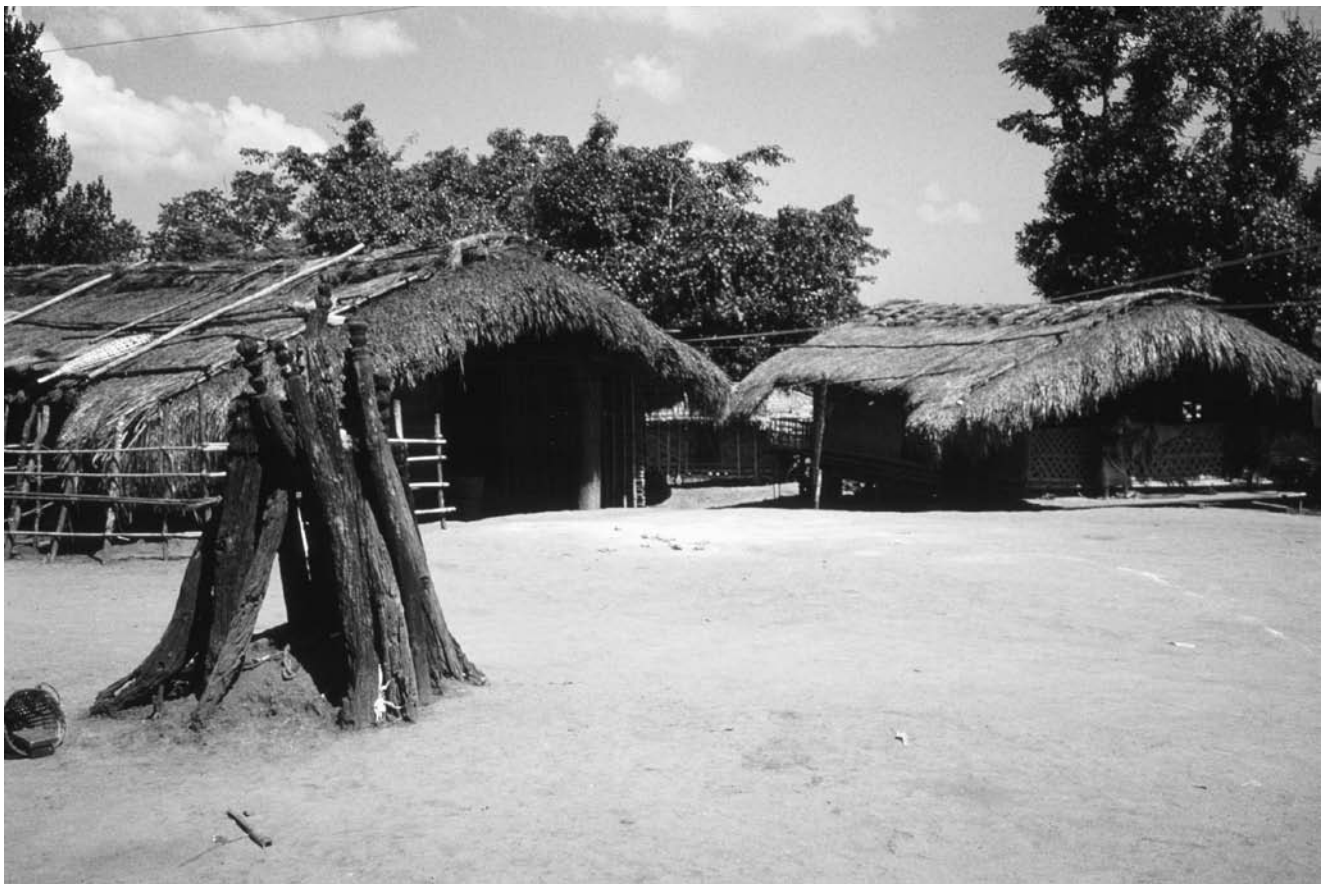
Later a number of girls would choose a marriage candidate from the available boys. A man went around and tried to put a feather in the girl's hair, probably a sign of marriageability. This was not always easy, and he had to chase some of them in the bushes.

I used the time to make photos of the public. It was so hot the black cover of my camera was shifting, so I had to be careful it didn't slip out of my hands. A village boy also took photos of the feast and tried every time to get us in the picture. Finally the boys with their drums and also a feather at the back of their head came out, and the dancing girls arrived.

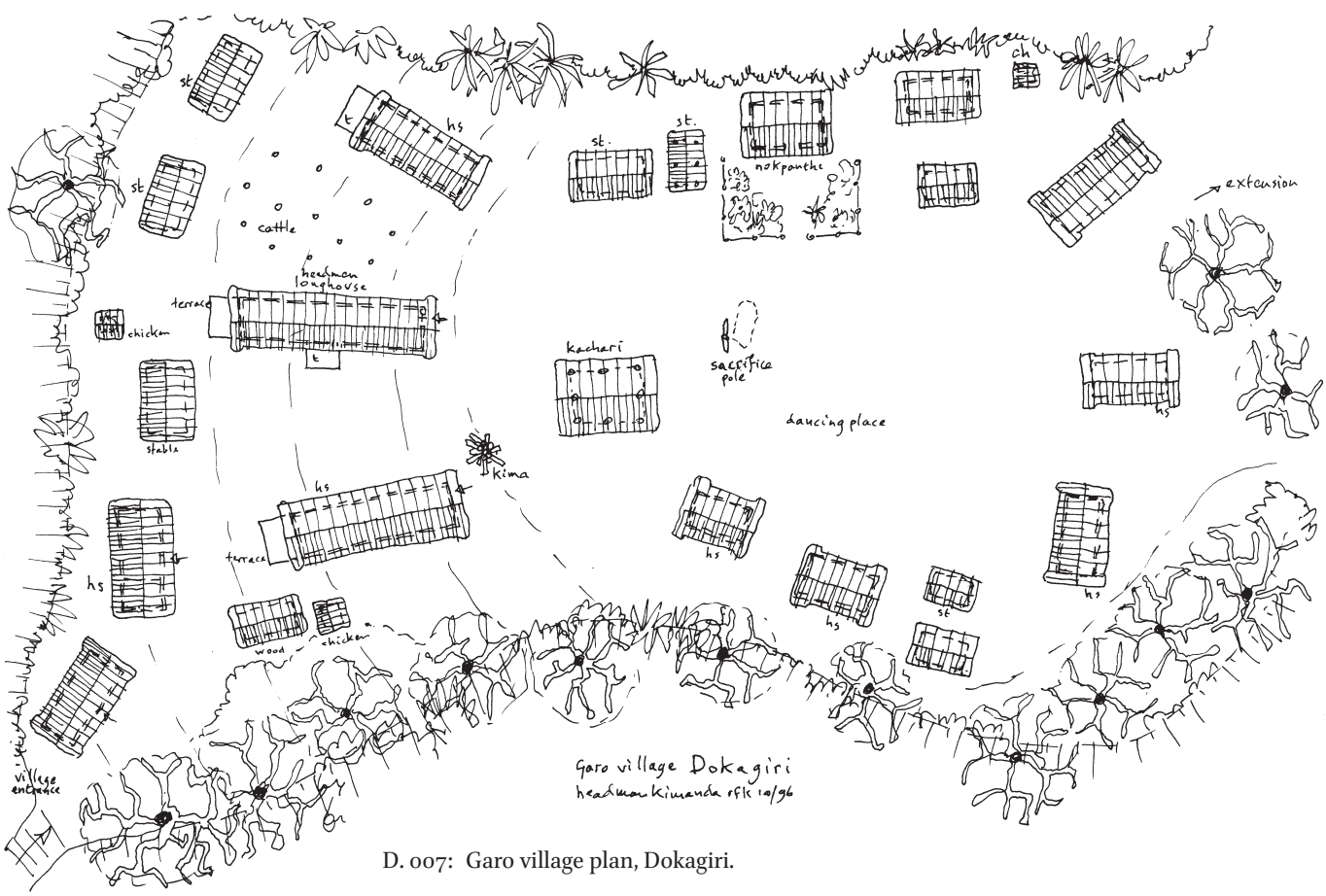
The first dance began as a kind of round dance. The headman appeared with a white dotted shield and sword, making swinging movements. A harmonium player joined the company, then the flutists and, although shy, the girls joined in small groups.

After the second dance, a man with a bowl of rice beer and a small gourd-cup came up to the dancing girls to let them drink. Some of them clearly didn't want to but relented after some insisting. In the meantime another man walked around with thick rice milk and used his fingers to make a white sign on the backs of dancers and public. We also got white fingers pressed on our backs.

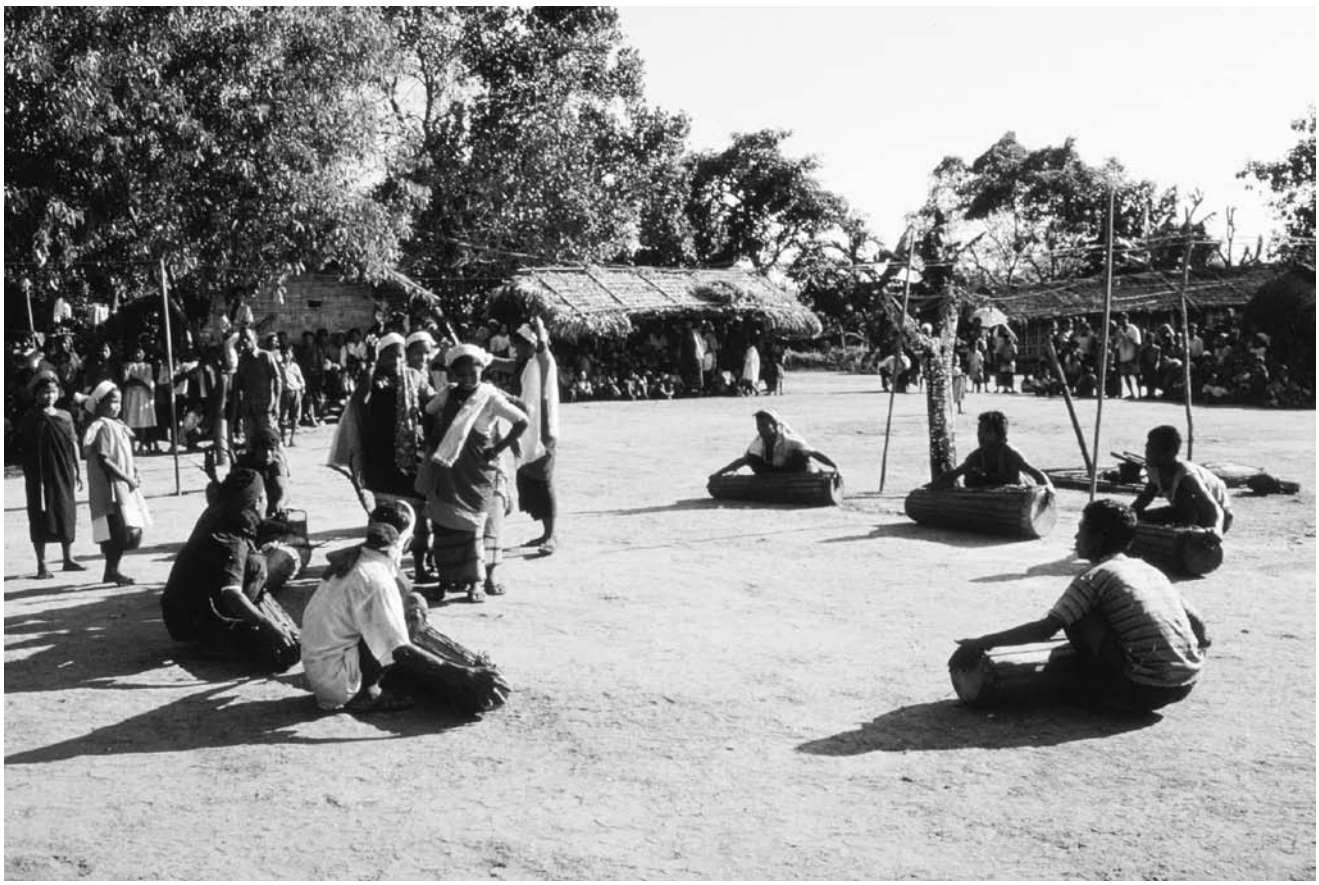
The third dance had a special meaning since the girls now chose boys as future husbands. The boys sat in a large circle on the ground and played on their oblong drums. Inside the circle the girls were danc-



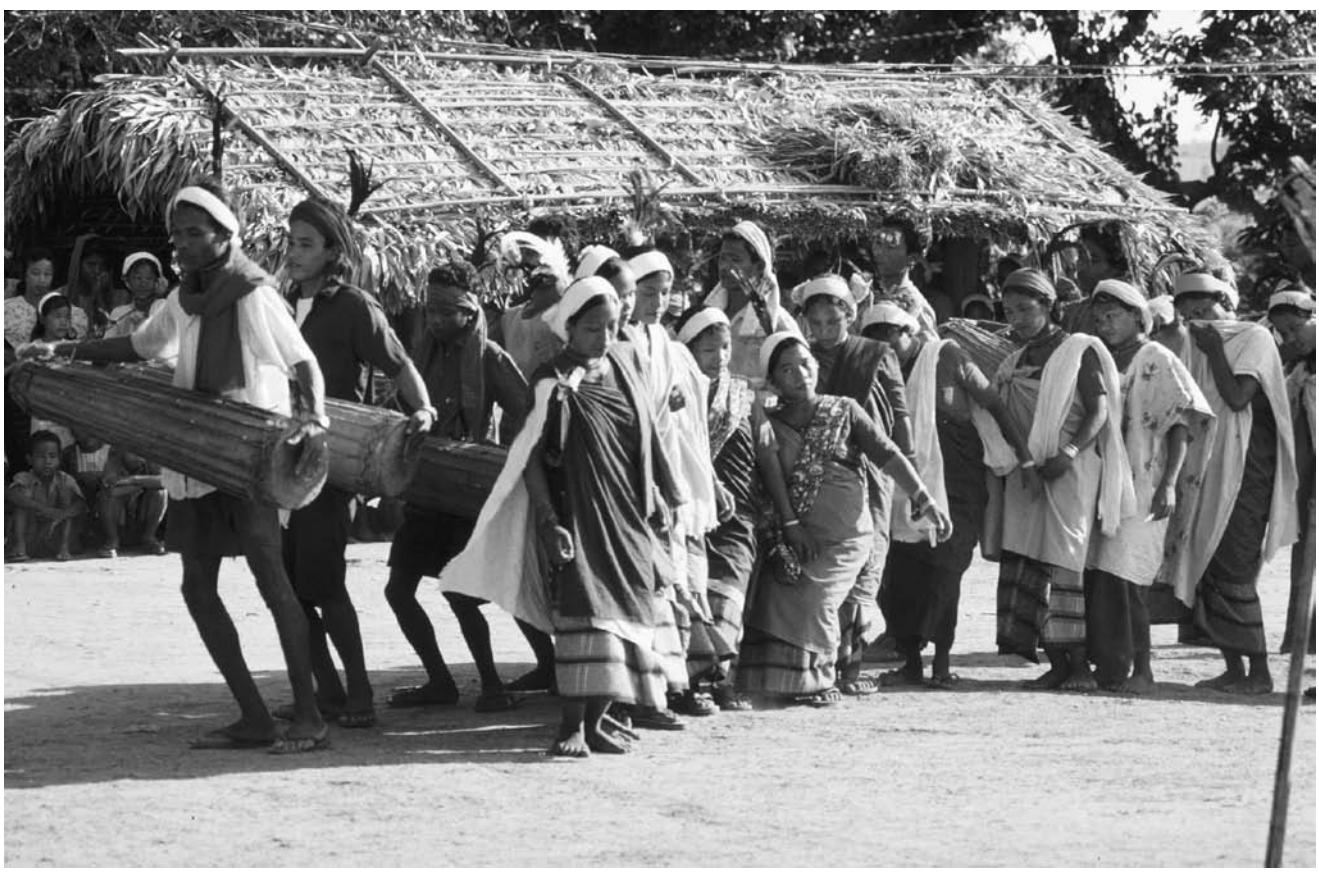
P. 009: dancing place with ancestor images (*kiwa*) and headman's house, Dokagiri, 1996.



D. 007: Garo village plan, Dokagiri.



P. 010: Wangala dancing, Dokagiri, 1996.



P. 011: Wangala dancing, Dokagiri, 1996.

P. 012: Garo 'talk-house' (*kachari*) and sacrificial pole, Dokagiri, 1996.

P. 013: two Garo headmen, Dokagiri, 1996.

P. 014: third Garo headman, Dokagiri, 1996.

P. 015: Garo male dormitory (*nok-panthe*), Dokagiri, 1996.

P. 016: Garo shrine for the deceased (*delang*), Dokagiri, 1996.

P. 017: Garo tree-house (*borang*), Maheskola, 1996.

ing around (P. 010 and P. 011). In public they had to make a kind of curtsey in front of the boy of their choice. The girls were very shy. One of the girls was so shy that she ran away just before her turn, but she was brought back.

Vehemently they talked her into doing her thing once more. The girls who did curtsey did it very hastily. It seemed that when a curtsey had been made, the girls had committed to the boy, and the parents would arrange the marriage in a few days.

Returning to Sibalgiri, we were invited by an old man, Mr Khanding, to look at his modernized house (D. 004). In the living room we saw a beautiful toy motor-bus, with windows, doors and wheels, ingeniously cut out of one piece of wood.

Mr Khanding's house was a simplified, modern variant of the traditional Garo house. The three rooms were here, but nearly equal in dimension, and the organisation had changed, like the one we saw in Boldakgiri: the entrance was half-way along the sidewall and both end-rooms were for sleeping. The kitchen, pigsty and firewood storage were built separately. The special columns (*maljuri* and *chusimra*) in the living-room were missing. But the basics of the building were the same as the original type. To make it sturdier, the construction included crosses and shores. The sliding door was beautifully done as were the details of roof and walls. A marvellous use had been made of the possibilities of bamboo, and cane was used for all the joints.

Together with his little grandson, Mr Khanding demonstrated the sliding door, hanging by two bamboos with holes fixed at the door, which slide over a horizontal bamboo fixed above the door opening (P. 007).

Children were playing nearby (P. 006). Higher on the slope in Sibalgiri, we looked at the house of Mr Ragin (D. 003), a variant of the original type on a platform. The rooms lay behind each other, but the entry room with the cooking place was kept open and firewood was piled up on both sides. So here the stairs gave direct entry from outside into the main room (*nok-ganchi*). As usual, the long living room had a central fireplace, at the rear was the bedroom and a terrace was built out at the side. The kitchen stood separately on a higher level in the yard. A big family of two grandparents, two parents and three children, lived in the house.

We heard from a lecturer in Tura about a 'famous, original' dormitory (*nok-panthe*) in Emangiri. He explained that it would take 3 to 4 hours driving over a muddy road and 16 kilometres walking. Talking about Garo villages he said that *kachari* means 'house of justice' and not 'meeting place;' the traditional word for that is *bandasal*.

Later, in our Tura lodge, a Garo servant said he once visited Emangiri by jeep and there was no need at all to walk 18 kilometres. So we decided to go.

The day we went the weather was glorious. Just in the distance above the river some clouds cleared away. After Nongkeng not much more of the road was left than a cart-track and later a wide footpath, which got more and more muddy and slippery. We had to leave the car and walk. A local resident said it was 1.5 to 2 hours walk from here. It was 8:45 a.m. and already very hot, so we used our umbrellas against the sun. The path was narrow and bordered sometimes by high overhanging grass or other plants with leeches. I found one on the inside of one leg; without me feeling anything he had climbed up via shoe and sock. When I pulled him off, a little circular wound appeared. A bit later also our driver, Sushil, had one. Only at night did I see the bloody pulp I had carried all day in my sock.

I had problems with the heat and perspired enormously; because of lack of water and salt I felt dizzy. After some rest and water it got better. The path went up and down, many times. Luckily there was more high overgrowth now, giving some shadow. Sometimes we could see the river below. Now and then we met Garo people and asked them about the right way. Walking in front for some time suddenly I saw a snake and stood still. He looked at me and slid quietly away into the side overgrowth. He was grey-green, slightly marked at his back and about 1.2 metres long and about 25 to 30 millimetres thick. According to Sushil he was a cobra, a king cobra. When I said I saw nothing sticking out at his head, he added that a cobra only has this when angry.

We went down to the river bank of sand and boulders. A banana leaf stuck between the boulders indicated the fordable place. With shoes and socks in hand, we waded through the rapid stream up to our knees. I walked very carefully, with cameras and sketchbooks in plastic bags. We crossed but after going some 200 metres along the river bed with boulders we had to cross again. Now it was more difficult because of the sharp and slippery stones on the bottom. Luckily we got to the other side without a scratch.

Climbing the bank, we came out on the market place of Emangiri. Most stalls were empty since the market day was the next day. Again I was thirsty and felt dizzy, so we sat at the tea house, where they had

no tea only hot milk. I drank two cups and it helped. We climbed along the slope behind the market and reached Emangiri a few hundred metres ahead.

The platform houses were of the modern type, with three rooms next to each other and a free-standing kitchen, very much like we had seen in 1996 in Rongehandalgiri. One difference struck me: on one corner a veranda stood next to a narrowed end room. On the big central village space were two football goals. At the other side stood the dormitory built on high poles, with extra stone pillars to support the platform, and a roof covered with corrugated iron. Already from here it was clear the building had been renewed. Of the original dormitory, for which we had come all this distance, only fragments lay in the grass in front of us.

We were led to the headman, who was in discussion with other older men. They had heard already of our coming and proudly they took us to their new dormitory, saying, 'The old one broke down years ago.' Although the building was renewed and shaped more airily, it was somehow still beautiful, especially the splendid tree-trunk staircase and the many wooden sculptures. I asked about the new metal roof and was told it was modern and went with the times.

The ingeniously hewn tree-trunk staircase led to the platform, more than two metres high. 'The staircase and the many wooden sculptures are all made by the headman', they said. 'A great artist,' I exclaimed.

The dormitory (D. 008) consisted of one big room. The first half was open, and the second half was enclosed with a back veranda. 'Now and then boys still sleep here, but the building is mostly used as meeting place for the old villagers. It's no longer a school,' they said, pointing at a newly built government school at the opposite corner of the village green.

The roof was supported by wooden columns, and the springy floor cover was made of flattened bamboo strips. The new dormitory was a combination of modern and traditional. Modern elements were the extra stone pillars under the platform, made of concrete or plastered brickwork. Modern also were the sawn roof beams and purlins and metal roof cover. But traditional parts were the wide, flat wooden columns and some round roof beams, both covered with carved sculptures.

Just above the platform, these wide, flat wooden columns were stuck into round wooden columns standing in the earth. The columns and roof beams also were beautifully painted with geometrical figures. In the roof at the front a carved open stanchion seemed to be a symbol of the Tibetan ancestry in which they believe (P. 018). Also traditional of course was the fantastic tree-trunk staircase, looking like an enormous caterpillar with a large head and backbone (P. 019). Lastly, the ends of the platform edge beams were sculpted with animal heads displaying large ears.

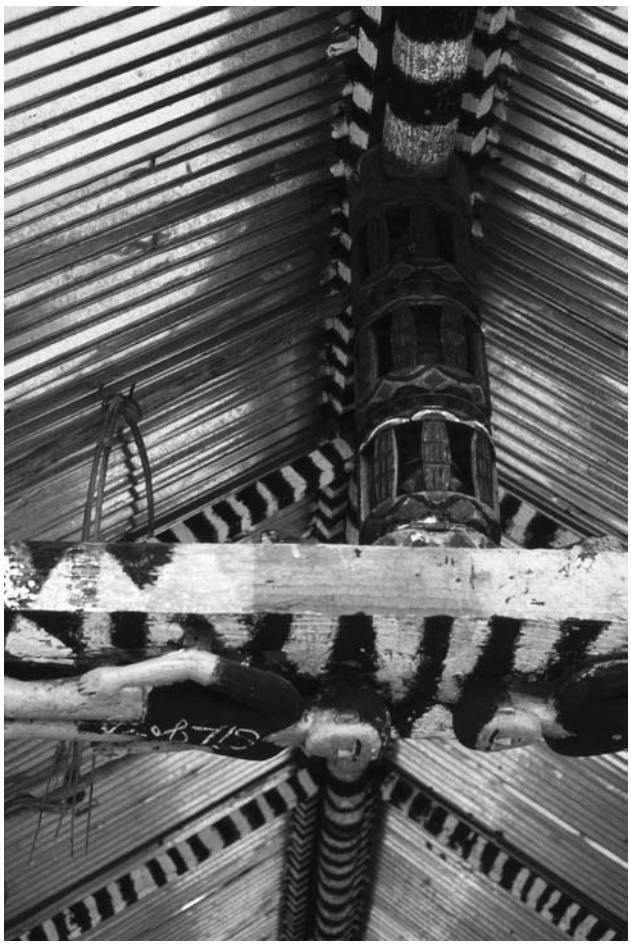
When I asked, 'Do you have a *bandasal*?' they said they didn't know what that meant. 'A *kachari*?' I tried. 'Yes, of course, that meant judging place. Also the *nok-panthe* is used as house of justice'. They didn't have any *kima*s (memorial poles for deceased persons) 'because everything is new here,' they said. 'Traditional dormitories don't exist anymore,' they say. 'Only modernised like this one.' I suggested that they must be Christians, and that appeared to be the case with nearly all of them. No more rice beer, no more Wangala dancing. What they celebrate is Christmas.

I asked about the situation one generation ago. 'Yes, at that time the original dormitory still existed and original houses stood here,' they answered. I showed them my drawing of the Sibalgiri headman's house, with front room on ground level, staircase to the raised living room with fireplace, *chusimrai* and *maljuri*, and bedroom at the back. 'Yes, earlier it was exactly like that here—now they are modern, everything is different. We live in modern houses,' they said, adding that all the inhabitants of the village had recently converted.

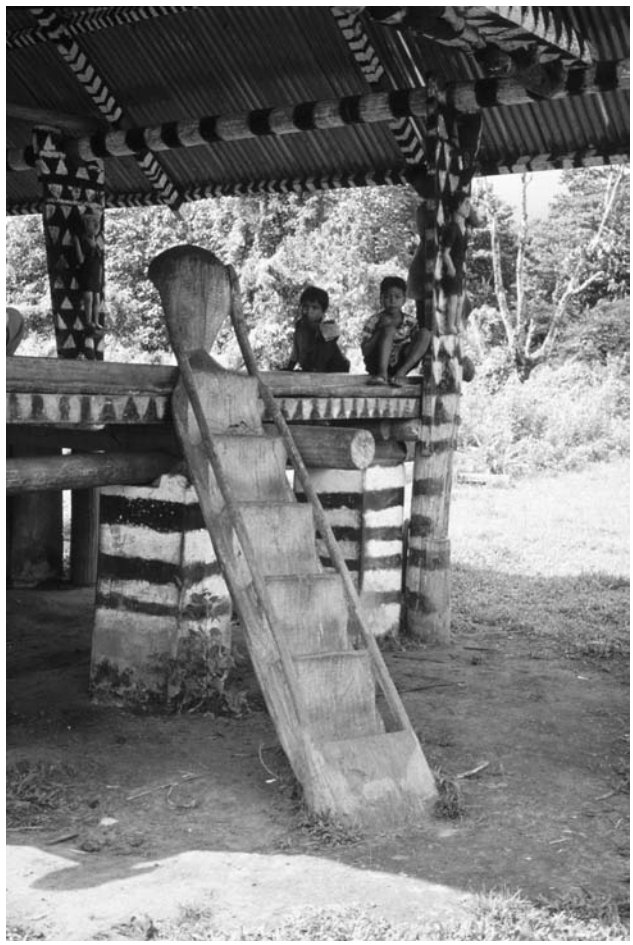
In the village of Nirumpa we went down a steep footpath between small fields with pineapples, banana trees and betel nut palm trees. The path finally opened into a plateau with the yard and house of Mr Digeng Sangma (Sangma is the name of one of the three large Garo clans). He was at home and willing to show us around.

The house (D. 009 and P. 020) was a variant of the Sibalgiri house (D. 003) without a front room. Here the bedroom was put in at a right angle to the main room, probably because of limited space. The platform was supported by stone pillars, and the roof overhung very far. The main room contained the two special columns (*maljuri* and *chusimra*), and the kitchen was built apart, on a mud plinth. Looking around the village, we saw that all roofs were thatched and had the typical Garo ears at the corners.

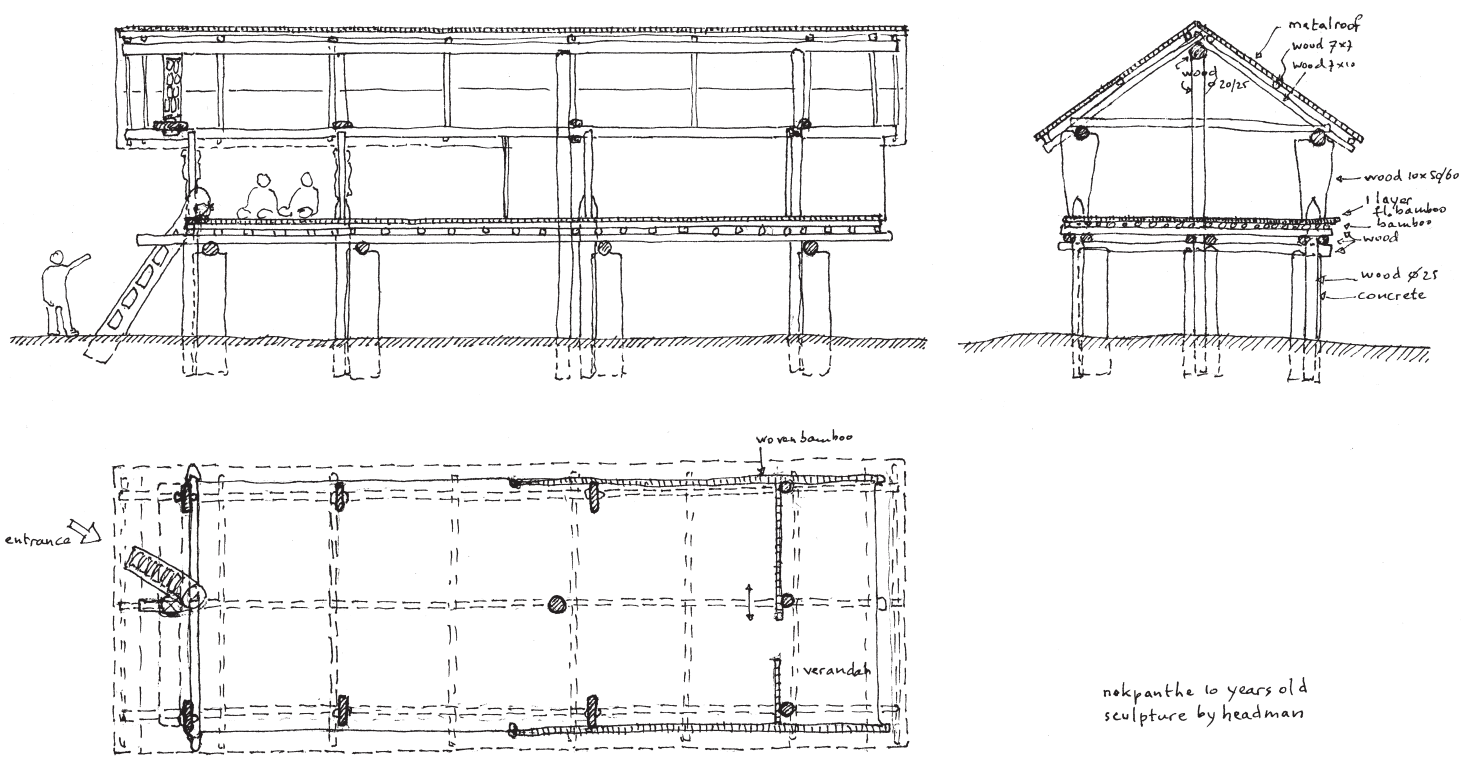
We asked what they prefer: a modern metal roof cover or a traditional thatched roof and sleeping on a platform or on a mud-plinth. They said, 'A thatched roof is much better; a metal roof is too hot in the sun.



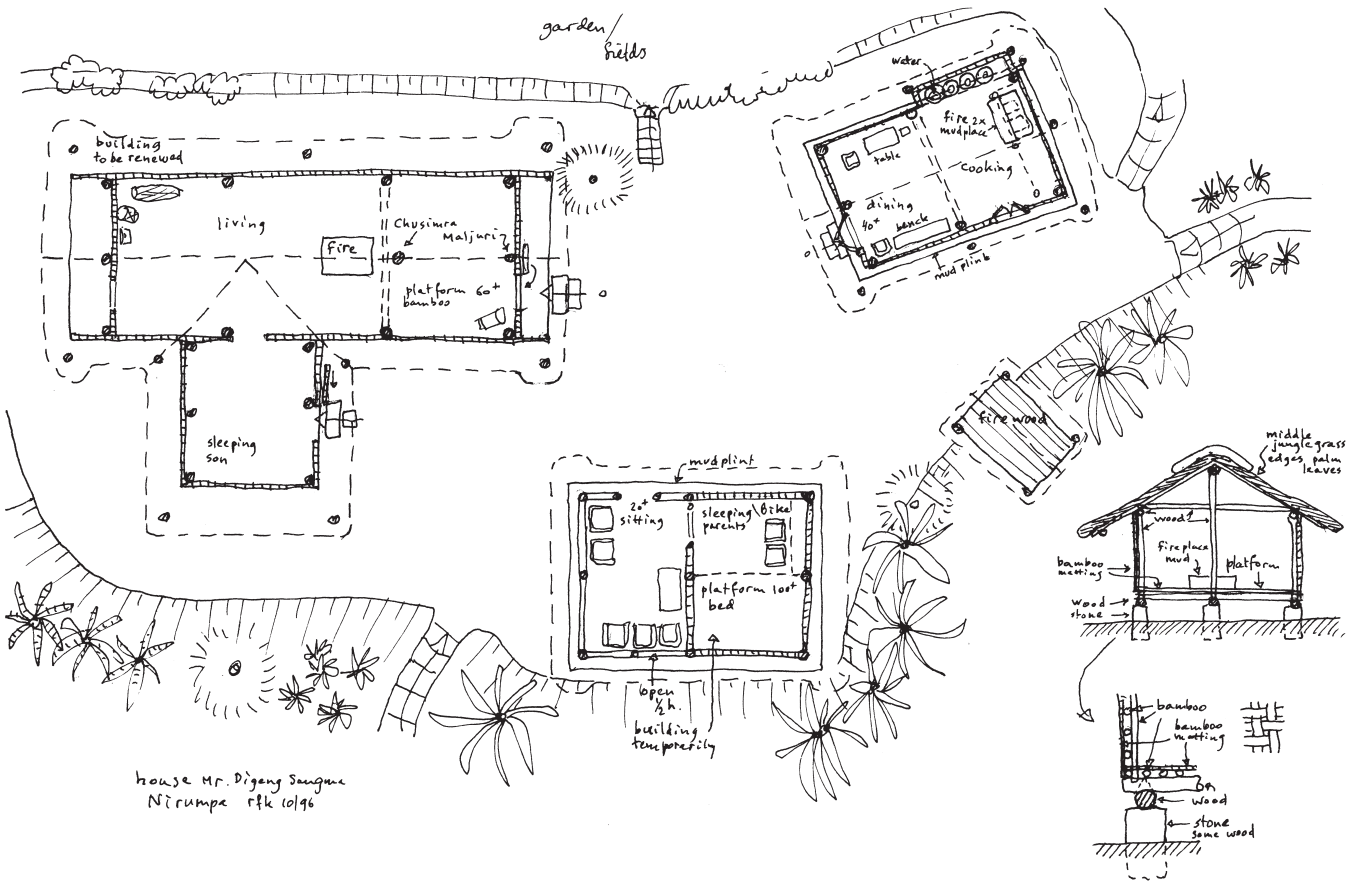
P. 018: roof ornaments, Garo male dormitory (*nok-panthe*), Emangiri, 1998.



P. 019: ornamented columns and staircase, Garo male dormitory (*nok-panthe*), Emangiri, 1998.

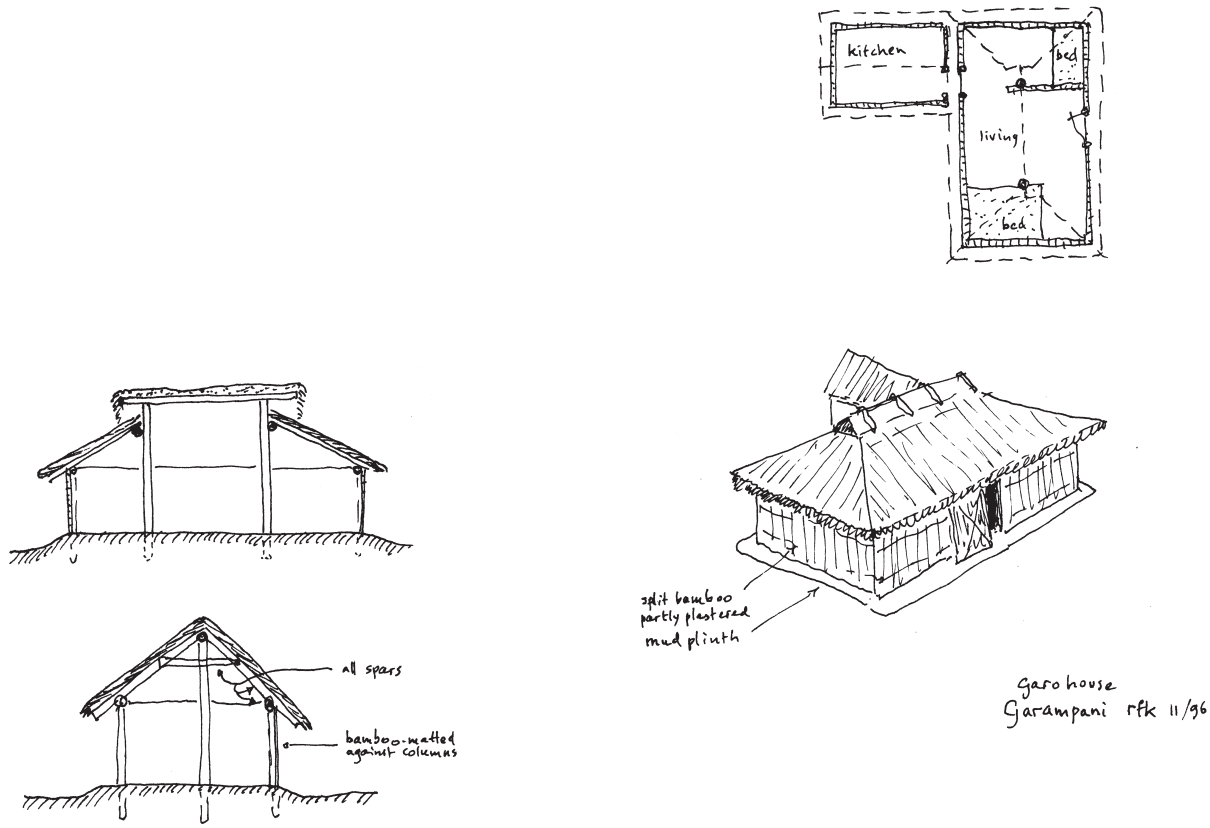


D. 008: Garo male dormitory (*nok-panthe*), Emangiri – plan and sections.



D. 009: Garo house, Nirumpa – plan, section and detail.

P. 020: Garo house in D. 009, Nirumpa, 1996.



D. 010: Garo house (Assamese style), Garampani – plan and view.

And for sleeping we prefer the raised bamboo platform above the mud-plinth because the bamboo platform is drier since the wind blows underneath.'

In one house, some music instruments lay in a corner of the living room: a few drums and a flute. The man showed us also a wooden shield and large sword, similar to what we had seen at the Wangala festival in Dokagiri. The drums were in poor condition, the skins slack and some torn.

Mr Sangma showed me the field where the jungle-grass for thatched roofs grew. It was a kind of reed with 15 millimetre wide leaves. I thought of the traditional Garo house with thatched roof ends, often with palm leaves and extended roof corners as 'ears.' And I wondered what could be the reason for those 'ears'. The people here said it was done just for aesthetic reasons, but I wondered because it was done in all Garo villages we had seen. Maybe there was a practical reason, to carry away the rain water, or maybe a religious reason.

In eastern Meghalaya we met a Garo man in Garampani village, who took us to his house. The oblong house (D. 010) was not typical Garo but of a more common local type on a mud plinth with a garden around it. The kitchen was built apart.

The roof was thatched, and the middle part had a horizontal ridge on two freestanding columns, which determined the inside partition. A raised floor behind one column was the sleeping place for the parents, and a second sleeping place was behind the other column. The walls were made of wooden poles, covered with woven bamboo and partly plastered with loam. The man told us he came originally from nearby Williamnagar. The reason not to build a Garo platform-house was the lack of wood in this area. So they chose the Assam type of house, of very light construction on a mud plinth.

KHASI

Overview

Khasi houses are built on a plinth, and some have a raised wooden floor inside the walls. They are rectangular with slightly bent side-walls and sometimes a half-circular end wall. The roof looks like an inverted boat. The houses are comparatively small, with a kitchen, a living space and one or two sleeping rooms. A few large houses (for an example in Jowai, see below) have five partitions, one behind the other. Jaintias (a sub-group of Khasis) build houses that are essentially the same, only larger.

In low lying areas, walls are wood or sometimes mud plastered bamboo, while high in the mountains stone blocks are used. The plinth is made of mud or bricks, but the construction is wood and bamboo. The roof is covered with thatch, though modernized houses have often metal roofs.

Commentary

Traditional houses were hard to find among the Khasis, who had begun to live mostly in modern ones. Then, high on a slope near Cherrapunjee, we passed two interesting looking small villages with thatched roofs. We followed a path over rocks, through water, mud, then more rocks, and came to one of these villages with a group of houses.

The whole family was standing in front of their house, behind a low circular wall in their yard, looking at us as we approached. (P. 021). We climbed up to the yard and greeted them. On the raised terrace the father squatted and warmed his hands above a square tin with fire. Sushil asked if we could look around and if I could look inside to see the partition and the construction and make a drawing. Luckily they agreed

I started inside. The first house had one room, a long rectangular space with two round wooden columns in the middle and an entry halfway along the long side (D. 011). The walls were about half a metre thick and about one metre high, and from them round purlins went up to the ridge.

A double cooking fireplace of clay was next to the entrance, and the storage room was behind a low wall. A low earthen platform at one end of the room functioned as a bed. The roof was thatched. The front terrace, two steps below the one long room, had an open-roofed construction at the side for sitting.

At the other side of the terrace stood a small goat pen. A light thatched construction against the short side of the house functioned as second sleeping room, probably for the children.

At the side of the yard, which was fenced by a short circular wall, was a fenced vegetable garden. The second house lay behind a walled courtyard next to the first house.

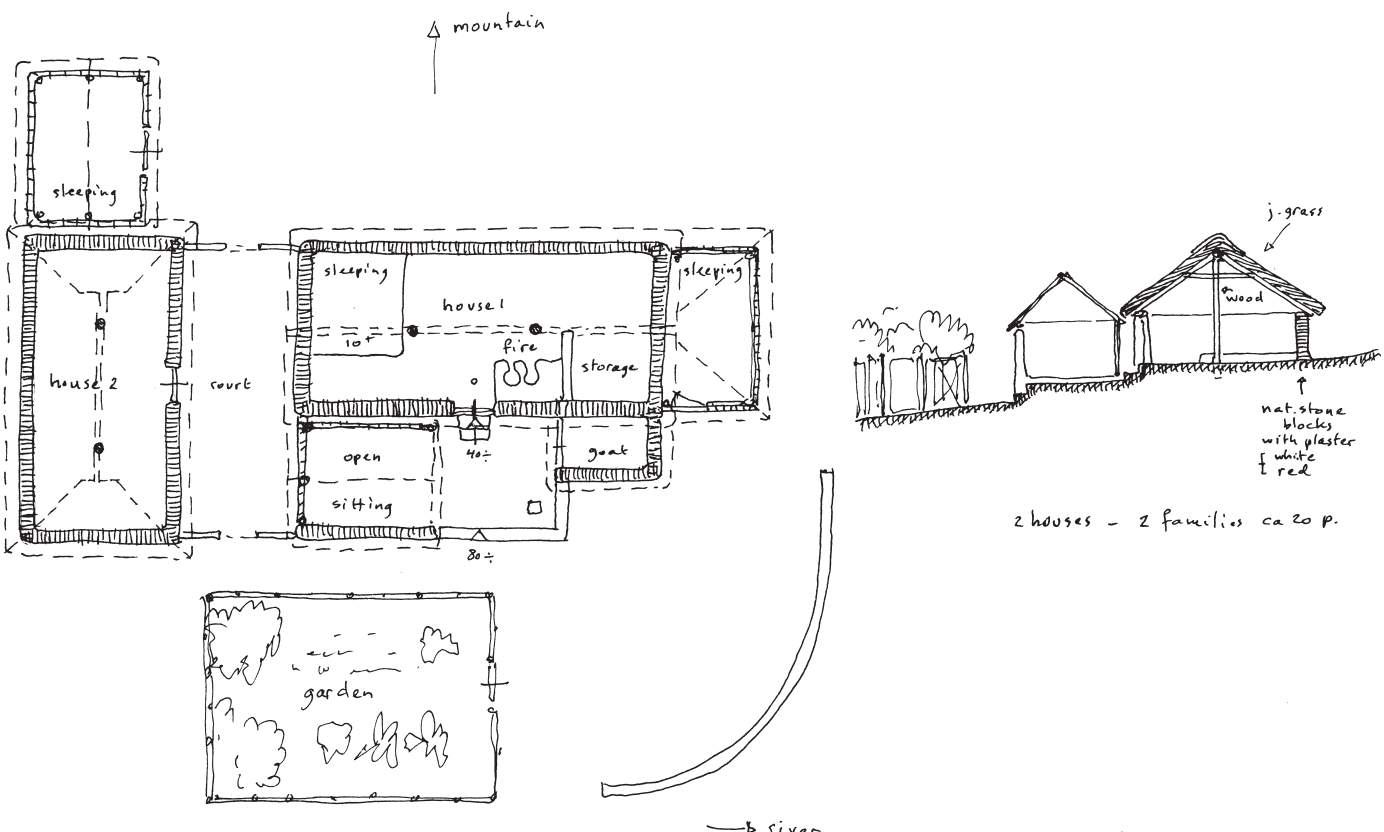
The thick walls of both houses were built with locally hewn, rectangular stones and mostly plastered; halfway up the walls were decorated with red clay and above that they were white washed.

Three years later, more toward the west and from the other side of a valley, we saw the village of Mawsynram. It had some more or less traditional houses with a rounded roof. Entering the village, we saw that in general the houses were built of stone, two storeys high, with a flat roof. The more traditional ones were one storey high, with a ridged roof (the ridge slightly curved) and metal roof cover.

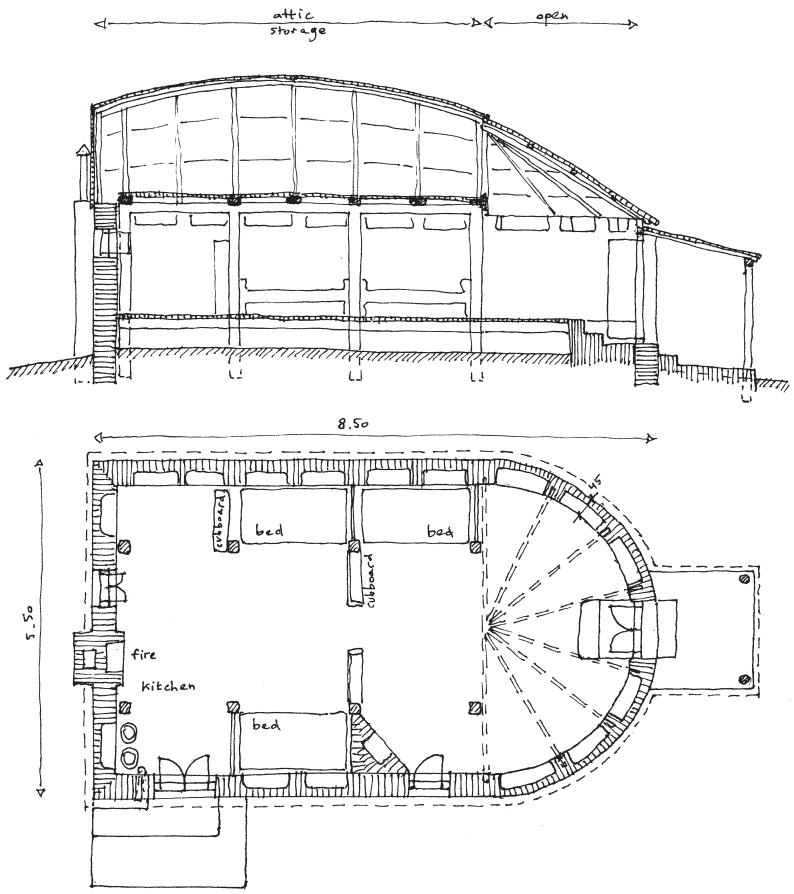
We visited two of these traditional houses. Two families lived in the first house (D. 013), which had a rectangular ground-plan and had been divided in two parts. The other house, for one family, had a semicircular wall at one end (D. 012 and P. 022). Both houses had chimneys and at least one window. The walls were built of limestone blocks, the raised floor was made of wood, as was the roof construction, and the roof was covered with metal.

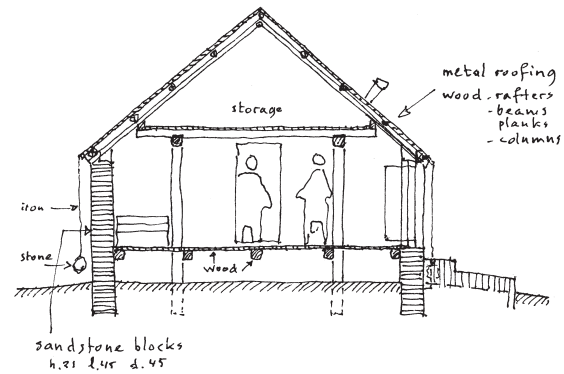
We stayed in the Circuit House in Jowai, a rather nice small town with shopping streets and a lot of new buildings. After tea and then lunch, we were told that the Circuit House officers were waiting to meet us. Our interest in local traditional architecture was mentioned and, as an example, I drew a Garo house. When I said it was a great pity that so few traditional Khasi and Jaintia houses existed, the officers thought for a moment. Then they revealed that they knew of a Jaintia house nearby, and one of them offered to go with us.

P. 021: Khasi family on front terrace house, near Cherrapunjee, 1996.



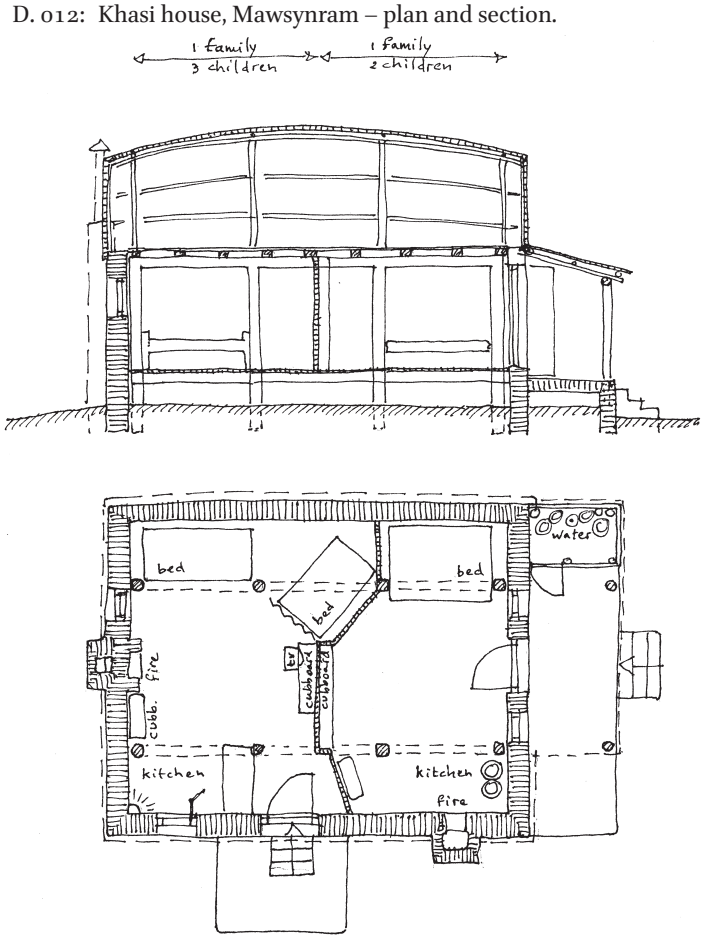
D. 011: Khasi house, near Cherrapunjee – plan and section.

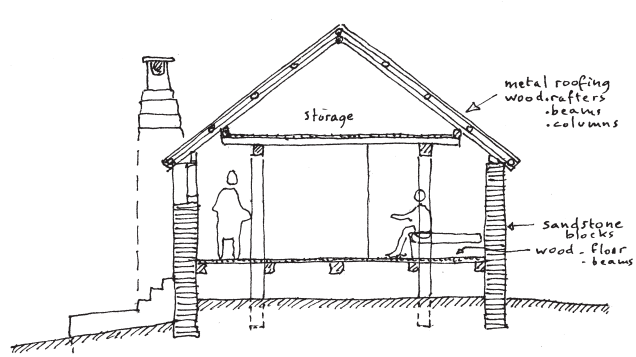




D. 012: Khasi house, Mawsynram – plan and section.

P. 022: Khasi house in D. 012, Mawsynram, 1996.





originally house for 1 family
later divided in two dwellings

Khasi house for 2 families
Mawsynram rfk 10/99

D. 013: Khasi house, Mawsynram – plan and section.

The Jaintia house stood between new concrete houses. The officer asked the lady house-owner permission to visit the house. Before entering we had to take off our shoes. Everything of leather, such as purses and belts, had to remain outside, where somebody would look after it, they said.

The large house was rectangular, with slightly curved side walls (D. 014 and P. 023). We entered at the front through a big veranda (*dheri*), followed by four rooms that were connected by double doors. The first and second rooms (*trethlong* and *shloor*) were for living and sleeping, the third (*rakut*) was a dining-room and kitchen, while the last room (*kyndur*) was the scullery and for storage. At the rear was a back entrance. The whole building stood on a high plinth, originally earthen but remade in concrete, the only modernisation of the house.

The construction consisted of heavy wooden columns and roof beams. Bent bamboos under the front and back porch spanned the distance between the side walls and, together with the bamboo purlins formed a strong grid-construction. The walls were made of thick wooden boards, but in the storage room they were stone, probably to keep things cool. The roof was covered with jungle grass.

We were offered tea and a snack, as I continued to draw and make notes of what the people told us. 'We live in the house with two families, in fact, two sisters with husbands and children, 15 people in total. Plus the sisters' brothers eat with us. The parents are not alive anymore,' they said. Later they claimed, 'We are Hindus now.' And then, 'We Jaintias are matriarchal, so the daughters get the inheritance, including the house.'

One of the men said he was a coal merchant, with his own truck and driver, so they were rather prosperous. The house showed that prosperity.

They maintained the house themselves, with help from other family members, especially when renewing the thatch every second year, which takes two days. The jungle-grass for the roof was bought in from a neighbouring village. In former days, they said, when all villagers lived in such houses, they helped each other build their houses.

'We use pine tree and bamboo for the wood construction. All connections are made with wood-pins or with split and wet bamboo tied together. The use of iron is taboo,' they said. Finishing my drawings and looking at the details, it struck me again that all the door openings had high thresholds and all the doors were made out of one piece of wood and turned on wooden pins at upper and lower ends.

The weather during our visit was very bad, with storms and heavy rain, but inside the Jaintia house one did not hear or notice anything. It was comfortable, dry and warm. Not so in the Circuit House, where the wind whistled round, rattling windows and doors. In several places, the rain leaked in, running in little streams through the corridors and over the staircase.

Next day, the sun shone now and then but soon disappeared in the mist and rain. We met a man protecting his head and back with a rain-shield (P. 024). I was allowed to feel inside. It was beautifully made, with bamboo and palm leaves, and still dry, in spite of hours of rain. A wonderful hat, just like the roof of a house.

The landscape was a mixture of pine tree forests alternating with fields of red earth, paddy fields and fields of green cabbages or potatoes and gardens with melons. We reached Smit, a Khasi village looking like many others in the area: a church, houses with corrugated iron roofs or flat beaten tins, and some concrete houses.

Across a large muddy lawn with different market-stalls we went through a gate and into large dancing place. At the back was a large Khasi house with thatched roof, the 'palace' of a Khasi king (D. 015 and P. 027).

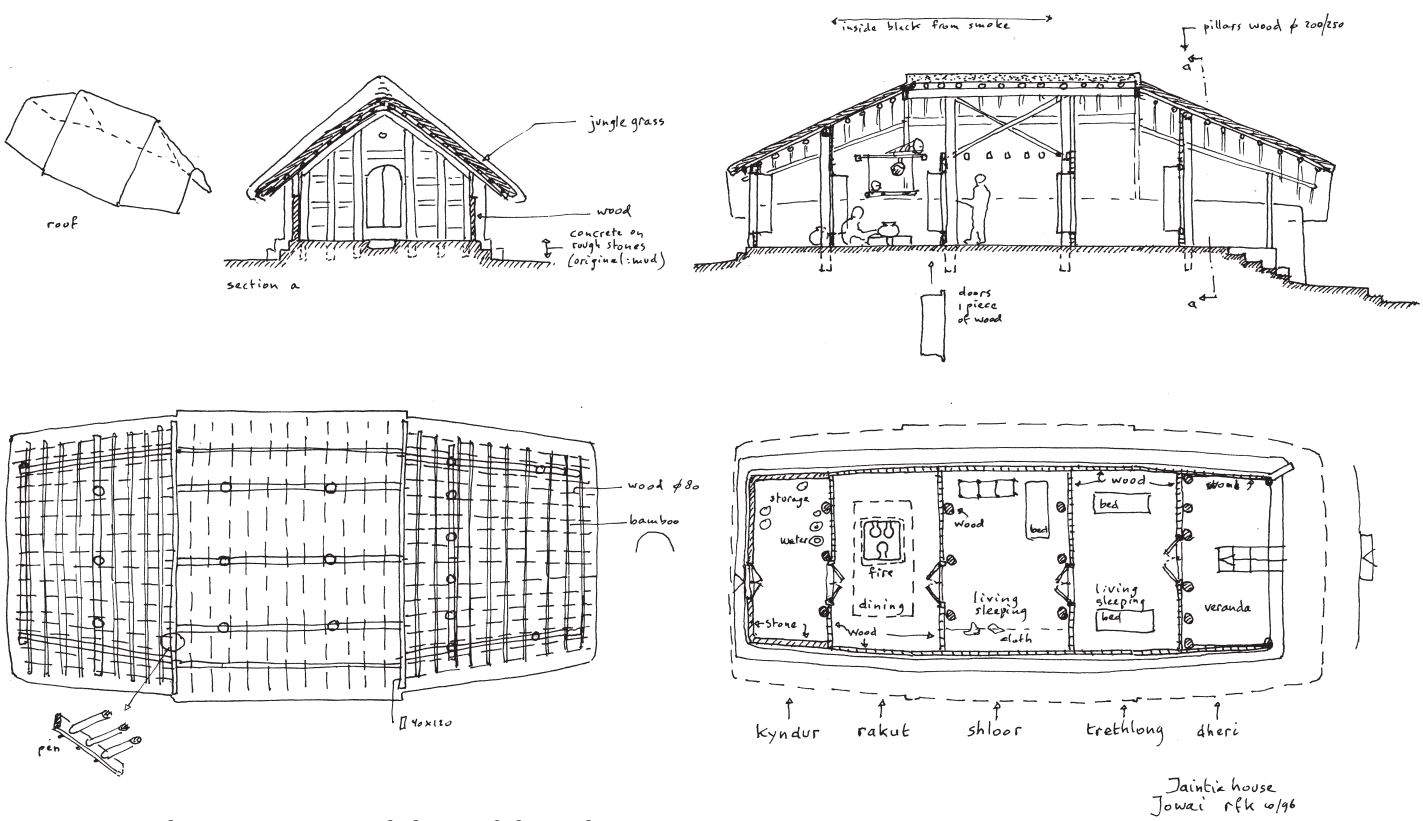
Historically, we were told, the Khasi area was divided in some twenty small states, each with its own king. In most of these states the inhabitants had converted to Hinduism or Christianity. Only here in Smit was the traditional Khasi religion still followed and its major festival (Nongkrem) celebrated.

'It is a harvest feast, when the gods are worshipped and goats are sacrificed. This time 41 animals,' they told us near the palace. 'The animals are offered by several important participants. The goats are now bleating in one of the palace rooms, waiting for the sacrifice.' It was the fourth day of the festival, an important day with music and dance (P. 025 and P. 026).

We entered the palace at the front side, where wide stairs led to a big veranda with side rooms. From there a porch opened to the central hall with a fireplace in the middle. 'This is the meeting place and assembly hall for invited persons, also for dances and ceremonial sacrifices,' said the manager of the palace. 'The column with surrounding mat is the holy place—forbidden to touch.' Around the central hall lay the king's private rooms, which were not open to visitors.

The building stood on a high plinth on two levels (the central hall was the higher level). The plinth and

P. 023: Jaintia house in D. 014, Jowai, 1996.

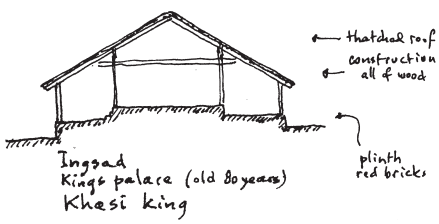


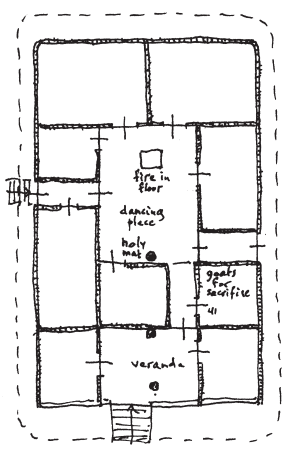
D. 014: Jaintia house, Jowai – ground plan, roof plan and sections.

P. 024: Khasi man with rain-shield, 1996.

P. 025: Nongkrem festival, Smit, 1996.

P. 026: Nongkrem festival, Smit, 1996.





D. 015: Khasi house / king's 'palace', Smit – plan, section, musical instruments.

P. 027: Khasi house / king's 'palace,' Smit , 1996.

the sidewalls were made of reddish stone blocks, bricks and a kind of sandstone. The rest of the construction was wood and bamboo, and the roof was thatched. Iron was taboo. 'The house is some 80 years old,' said the manager. 'Only the thatch has to be renewed every two years, which is done with the help of the whole village.'

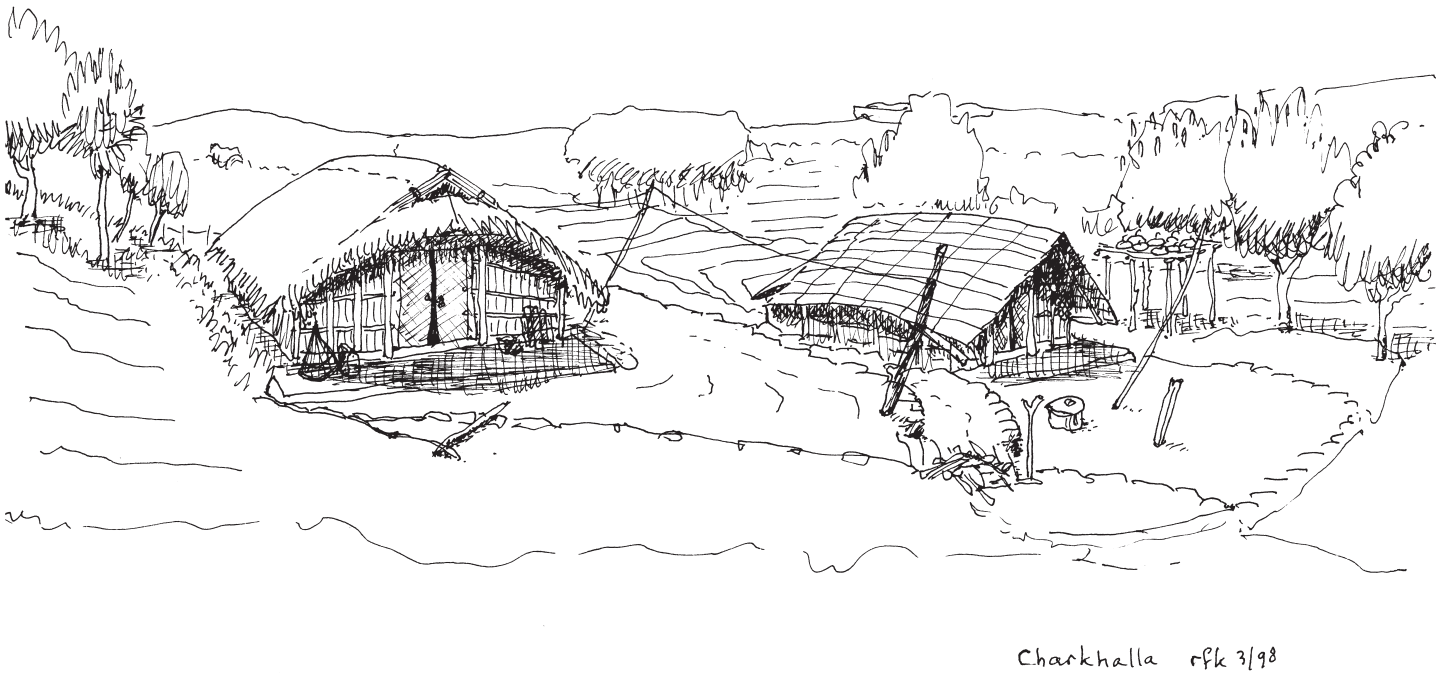
In a sparsely populated area, we visited Charkalla village of the Pnar people, a subgroup of the Khasi. We walked down the slope toward two traditional-looking small houses, where a woman kindly let us into the yard. 'The people have gone to the market,' she said and later added, 'the villagers here are Hindu.'

Each of these two houses consisted of two rooms, a kitchen in front and a sleeping room behind (D. 016 and D. 017). 'In each house lives a single family of parents with children,' the lady said. The house with a thatched roof of jungle grass had a sort of oval shape, and the back and sidewalls were slightly curved. The other house, with a metal roof, had a rectangular plan.

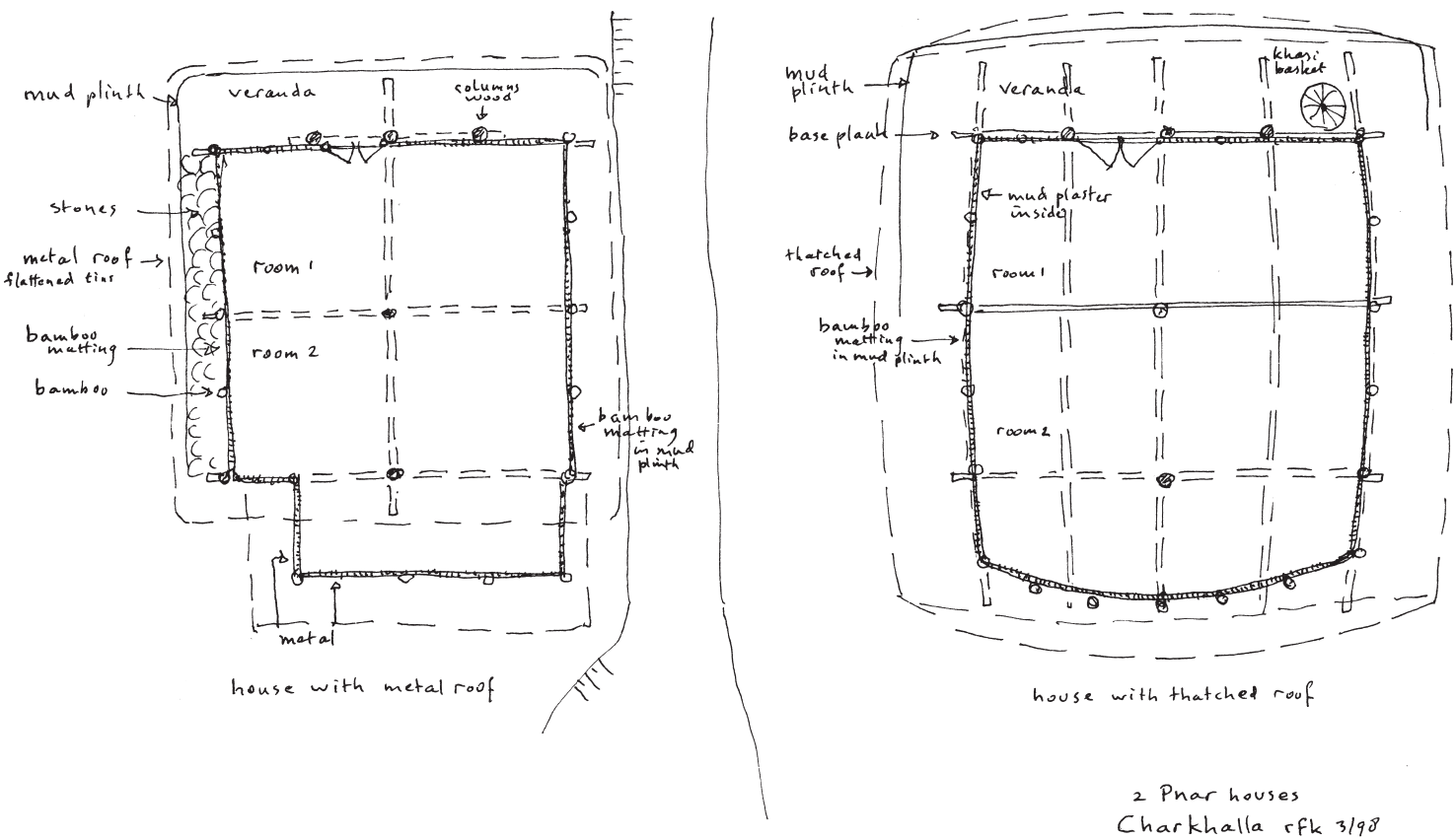
Both houses were built on a low earthen platform with matted bamboo walls and both had the characteristic Khasi roof shape with a slightly bent ridge. However, these houses are only a faint reflection of the traditional Khasi houses, such as the one we had seen in Jowai (D. 014).

On our way we met a boy with a cart, taking his little brother and sister for a ride on what was a Sunday (P. 028).

We visited a beautiful group of memorial stones (dolmens and menhirs) near Nartiang (P. 029). We had come here two years ago, in 1996 in heavy rain, and this time we found there were even more stones than before. Everything looked different, though the impression was again very special. Endless quantities of stone lying and standing in groups among centuries-old trees, some damaged by lightning. The age of the stones was uncertain, although we passed one group dated 1995, possibly a grave monument for a headman. Proof that these memorial stones were still erected.



D. 016: Khasi houses, Charkalla – view.



D. 017: Khasi houses, Charkalla – plan.

P. 028: Khasi children with self-built cart, 1996.

P. 029: memorial stones (dolmens and menhirs), near Nartiang, 1996.

B. ASSAM

KARBI

Overview

Karbi houses are built on a platform and are divided into a men's section (*hong pharla*) and a women's section (*kut*), which are connected by an entrance terrace (*hongjai*). The panels and covers of walls and floor are made of woven, flattened bamboo. Bamboo is used for the columns, beams, floor and walls, while grass is used to cover the roof. Wood is used sparingly, mainly along the floor for the edge-beam (*bhuruta*). No iron is used.

Commentary

In a local medical clinic, we met Dr Rongpi, a Karbi man, who knew a lot about Karbi culture. I showed him the drawings I had made during the last few days of some Karbi houses in Rongterra (D. 019). 'Oh, but those are not traditional Karbi houses,' was his reaction. He described what they looked like and made a sketch to show me.

When he found that we had a car, he said, 'I can show you real Karbi houses in my ancestral village, high in the mountains, 50 kilometres away.' 'What about the patients?' we asked. 'Oh, the other doctors will take care of them. Let's go,' he enthused.

We continued our talk in the car and I was amazed by his knowledge about all kinds of subjects: landscapes in Switzerland and Norway (although he had never been in Europe), language politics in Belgium, the history of the Habsburgs and William III, Dutch painters, the Jewish religion and so on. He was interested in materials, products and processes. The man was a walking encyclopaedia, who spoke eight languages.

We followed a small winding road up into the mountains and, at a height of 1,200 metres, came to Rongmandu, his ancestral village. He greeted an aunt and other relatives, who were very happy to see him again. The village had four clusters, and the one we visited had three houses situated around a common ground on a mountain ridge.

Dr Rongpi told us about the village: 'Once there were 20 houses, but many people have migrated into town. Ceremonies are held on the village square, while meetings of the village elders use the headman's house.' They knew the dormitory system, but no building is available for a dormitory or meeting hall. The boys slept in the men's section of their house. About religion, he said, 'Many local Karbi people still follow their traditional beliefs, based on animism and ancestor spirits. Only a few have converted to Christianity or Hinduism.'

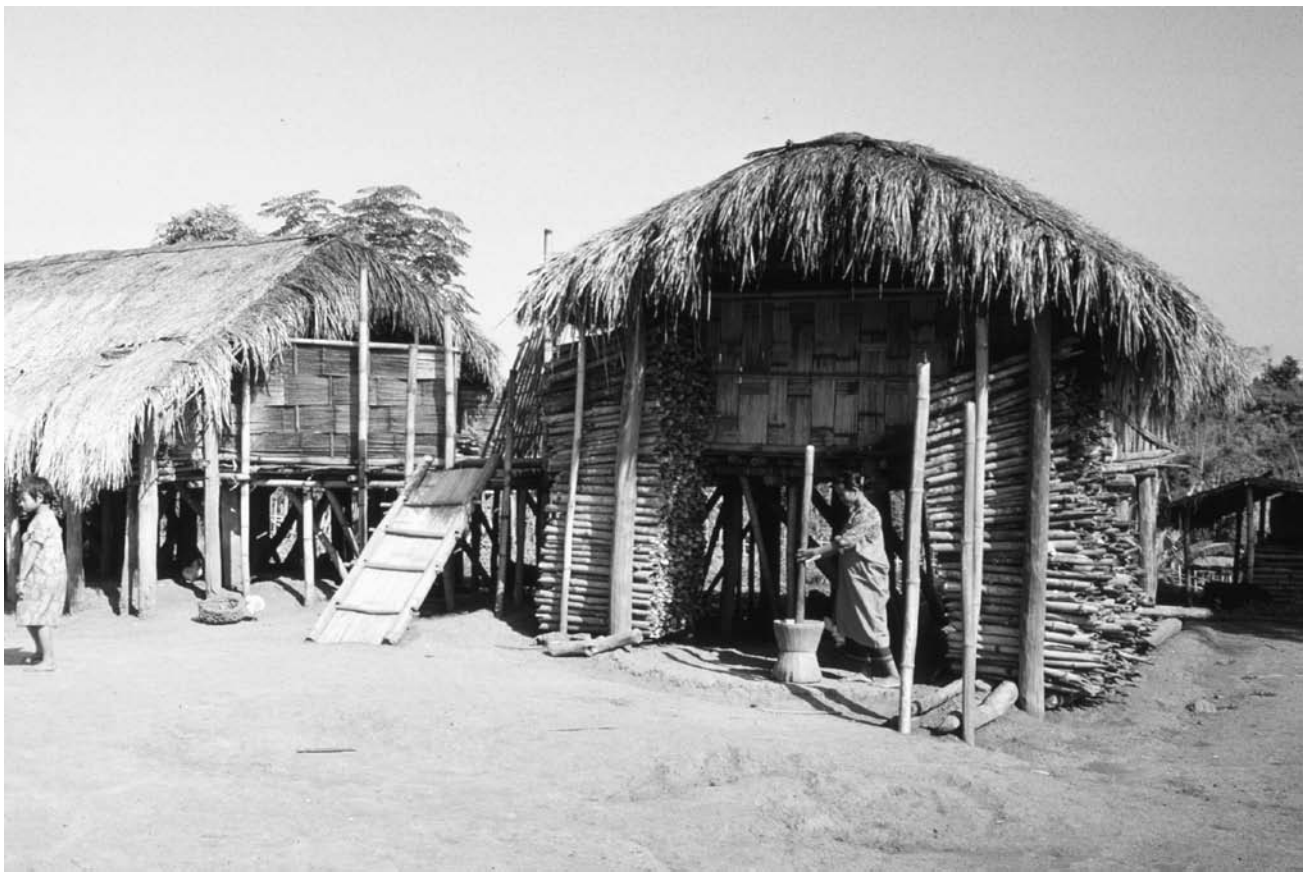
All three houses in this section of Rongmandu were traditional and built on a platform. The house we visited had two separated parts, one for women and children and one for men (D. 018, P. 030, P. 031 and P. 032). The two parts were connected by an open terrace, which was also the entrance of the house reached by a staircase.

The longer part with the roof facing the terrace consisted of two rooms. The bigger room (*kut*) was the women's and children's residence, with a cooking fire and sleeping space. The smaller front room (*kam*) was for storing rice but was also used by the parents for having sex, which was not possible in the women's or men's compartment since they always had people there. An extended family lived here: grandparents, parents, brothers and sisters, with wives or husbands, and children.

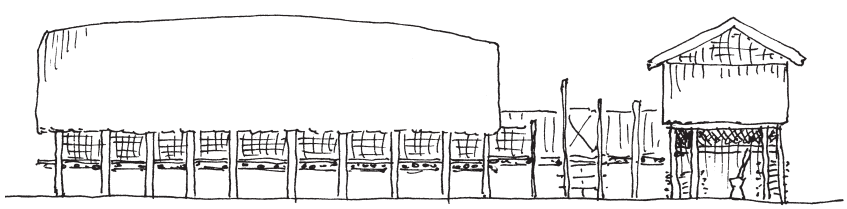
The terrace (*hongjai*) was used for drying cereals on mats and had a narrow separated extension (*pang*) used for water storage, washing and toilet. Next to this was another small extension used as a chicken-coop, but was (according Dr Rongpi) a modern addition. 'Animals don't belong on the terrace but in separate structures outside,' he said.

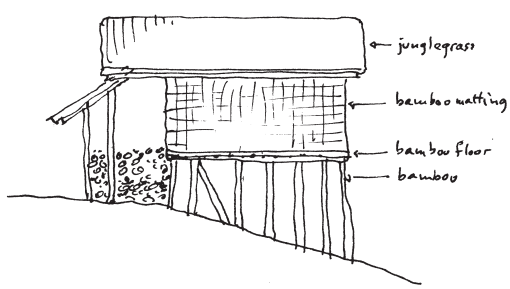
Opposite the women's quarters was the men's residence (*hong-pharla*), containing their sleeping place, as well as living room and a place for receiving guests. The fireplace in the middle was not for cooking but to sit around. The extended roof at the front offered a dry place for pounding paddy and storing firewood.

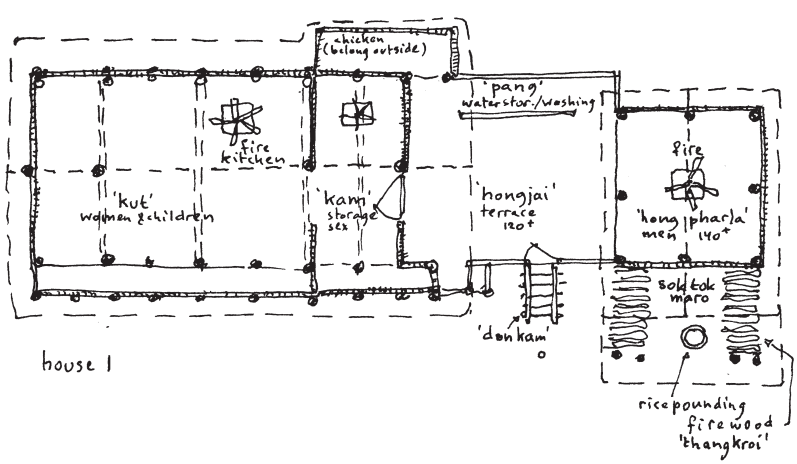
The panels and covers of the walls and floor of the entire house were made of woven, flattened bamboo. In a typical Karbi house everything was made of bamboo and grass; iron was not used. Bamboo was for the columns, beams, floor and walls, while grass was for covering the roof. Wood was used sparingly,

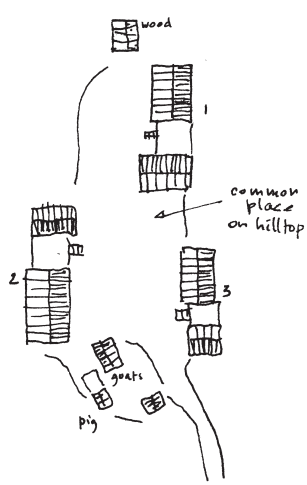


P. 030: Karbi house in D. 018, rice pounding, Rongmandu, 1996.









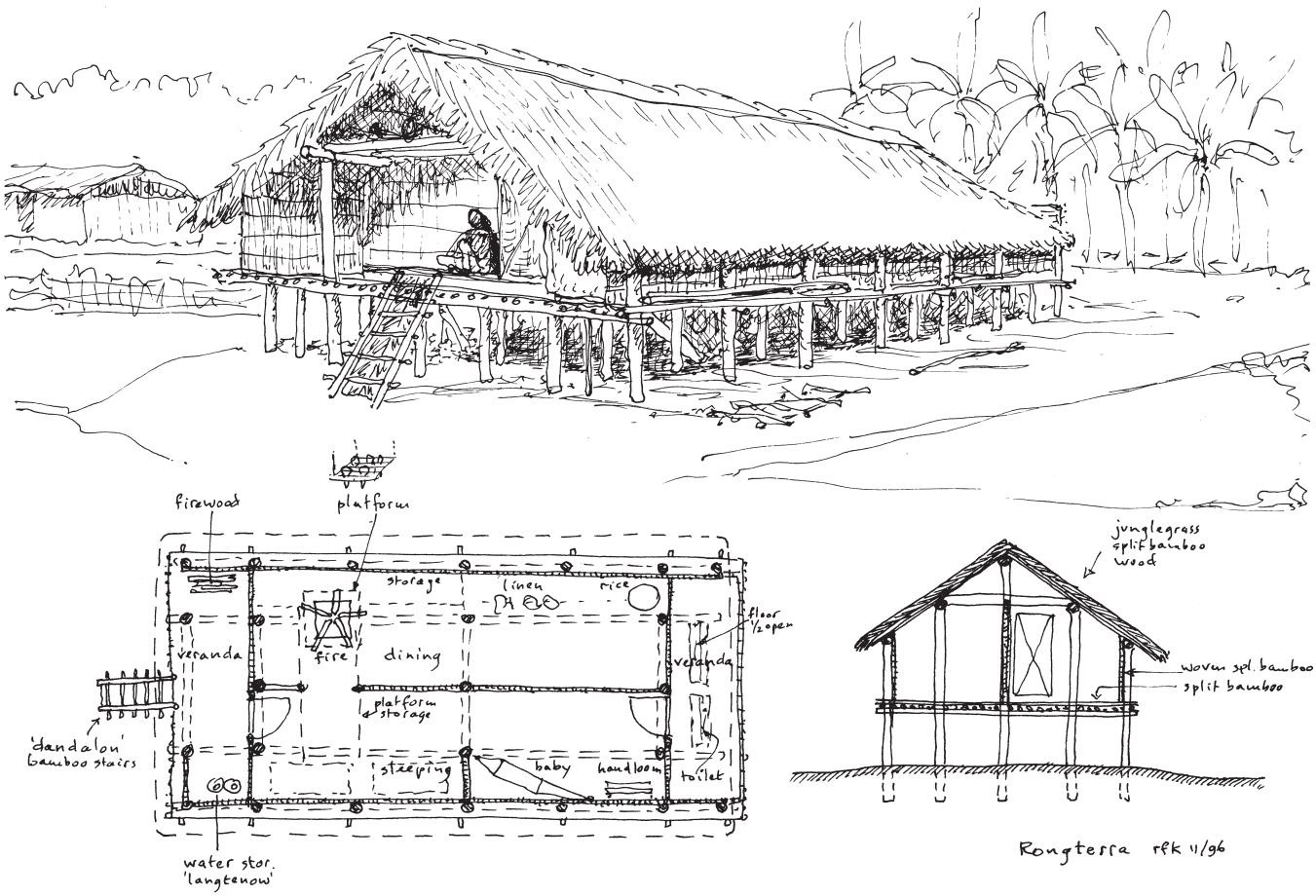
3 Karbi houses
Rongmandu rfk 11/96

D. 018: Karbi house, Rongmandu – plan, views and village plan.

P. 031: Karbi house, women and children, Rongmandu, 1996.

P. 032: detail of Karbi house, Rongmandu, 1996.

P. 033: Khasi woman with ear ornaments, Hamren market, 1996.



D. 019: Karbi house, Rongterra – plan, section and view.

mainly along the floor for the edge-beams (*bhuruta*) in which the woven bamboo walls were fitted in a notch.

In Rongterra village (before we had met Dr Rongpi), we looked at a house on a platform, next to another house on an earthen plinth. An old couple didn't like our looking around and wouldn't let us in. Then their son, the village headman, arrived and welcomed us. We gave him a necklace as a present for his wife, but he didn't understand or didn't want to understand, for he directly put it round his own neck and was very happy with it.

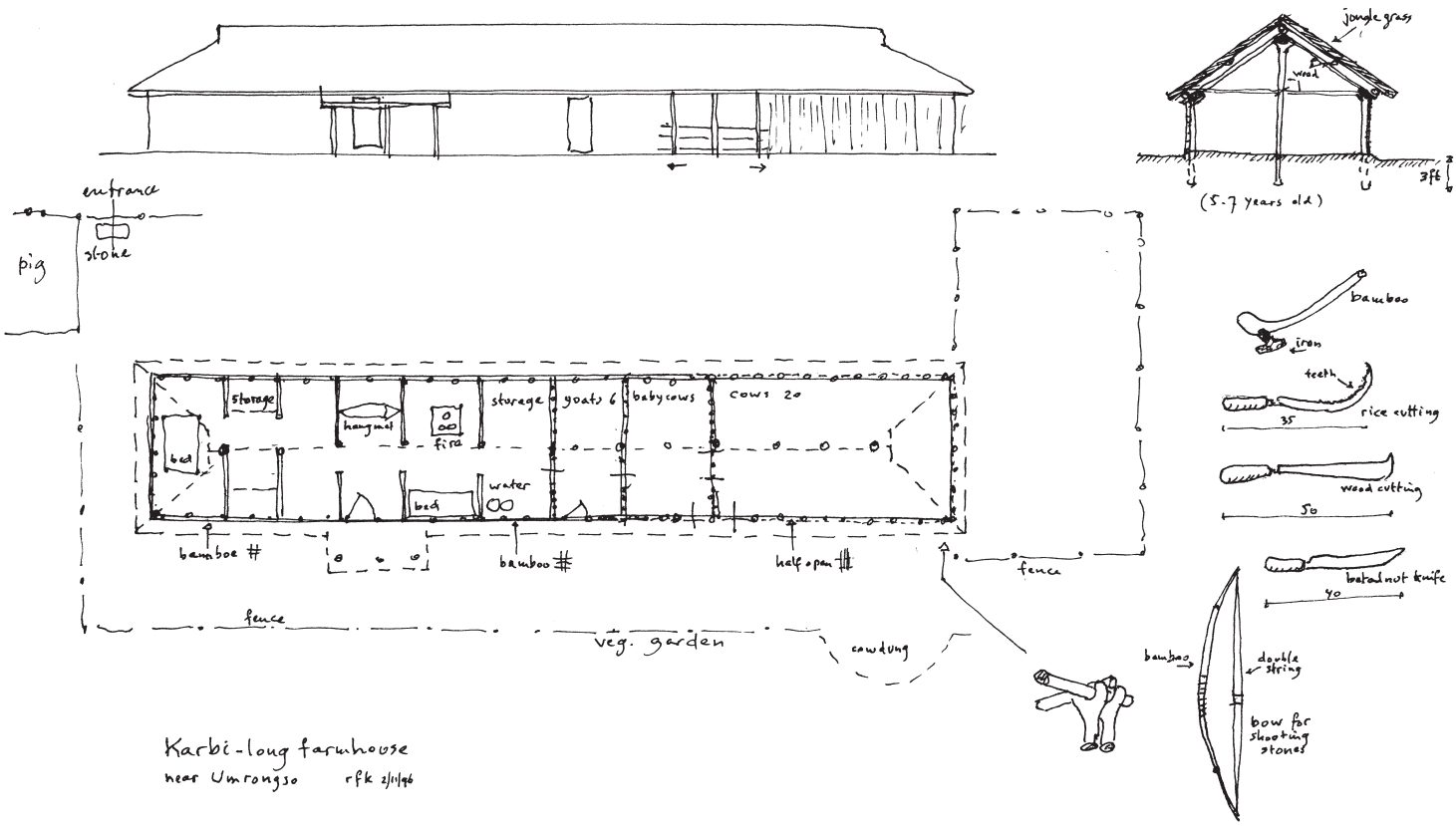
Anyway, he was willing to show us the house (D. 019). 'My cousin lives here with his wife and baby, and my parents live in the neighbouring house on the plinth,' he explained. In fact it was a modernised type of a Karbi house, with a different ground plan. It consisted of one large room, divided down the middle into living, sleeping and cooking spaces, with a small veranda at the front and rear.

We visited another house inhabited by a Karbi family of four persons near Umrongso (D. 020). The woman showed us the house and said, 'The construction is about seven years old. In fact, it is an Assamese type house. We separated it in two equal parts. In the first part we live with our two children. The second part is used for the animals.' So the animals lived under the same roof as the family. In the kitchen she showed us her tools: a hoe of bamboo and iron, three different knives for cutting wood, paddy and betel nut, and a bamboo bow for shooting small stones to scare wild animals.

Passing through the market in the village of Hamren, we saw two women with typical Karbi ear ornaments (P. 033).

Next we visited Keroni village, where we met a Karbi man who was the owner of a house with a big tree-house at the back. He was willing to show his house. 'Yes, we are Karbis,' he said. 'We live here as one family of 10 persons.' Pointing at a three-wheel car with oil barrel standing under an open roof, he said, 'I sell petrol.'

The house was not traditional Karbi, but more an Assamese type, built on an earthen plinth (D. 021).



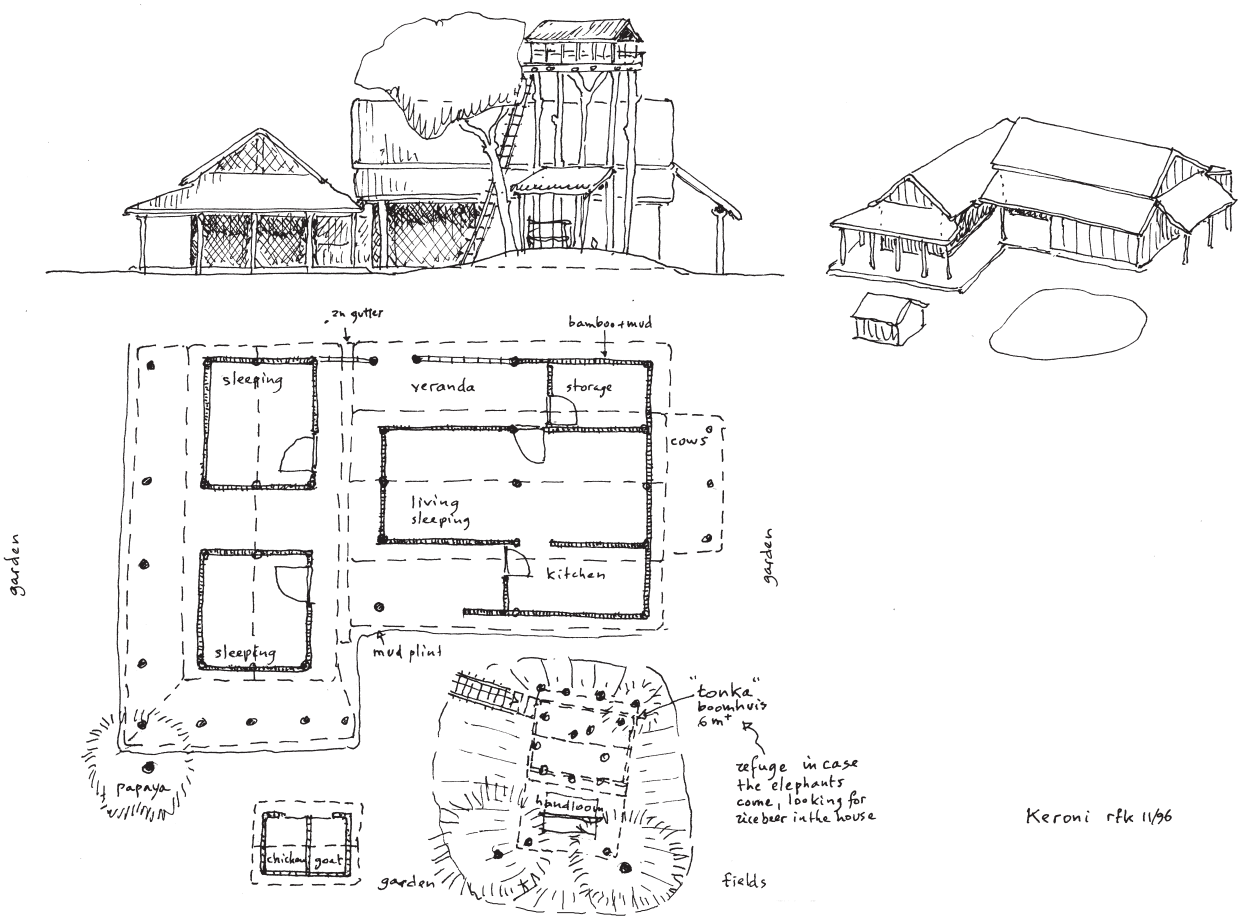
D. 020: Karbi house, near Umrongso – plan, section, view, utensils.

'The wood here is too expensive,' he said. 'That's why the house is not built on a platform.' Also the ground-plan was different: two buildings with a covered passage in between, the roofs touching each other. One part consisted of a living/sleeping room and two verandas with kitchen and storage. The other part had two sleeping rooms and a surrounding veranda.

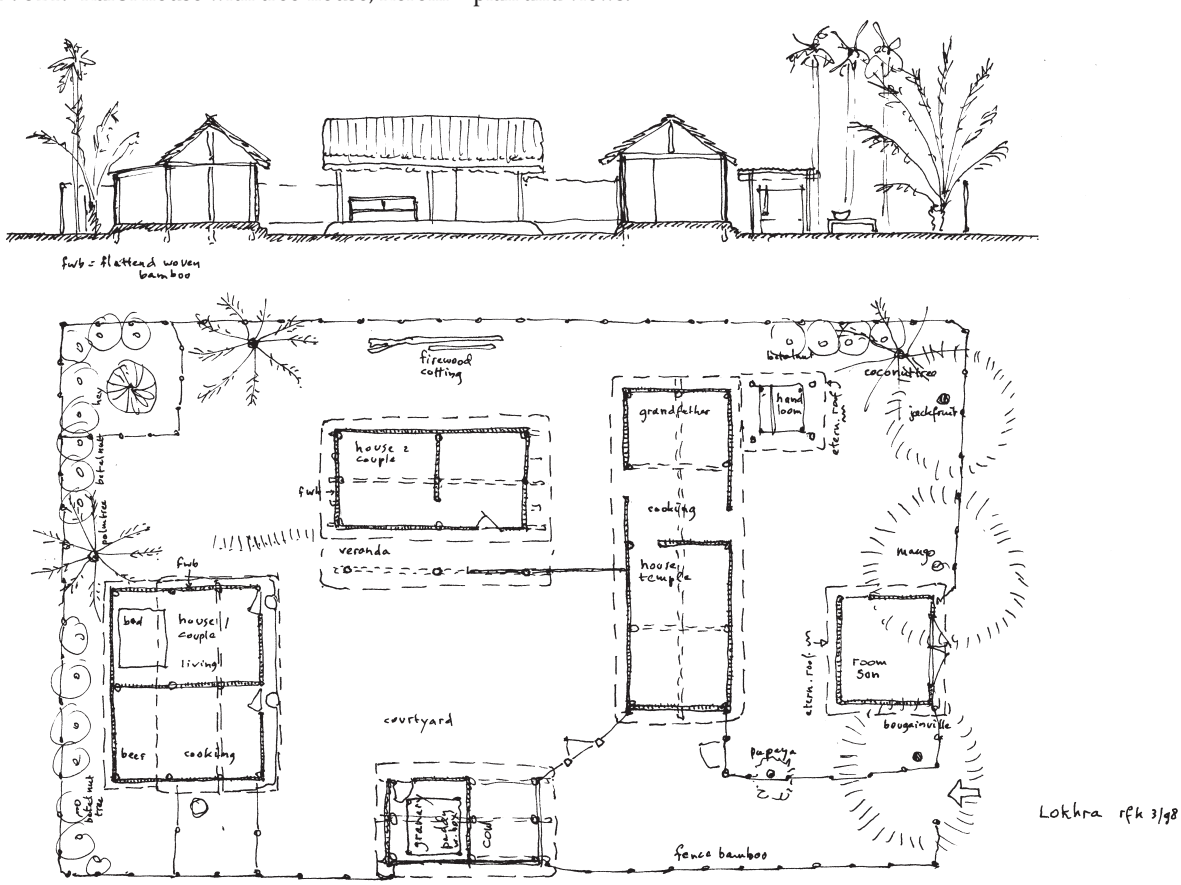
More interesting was the tree-house. 'We call it a *tonka*,' he said. 'It's built as a refuge in case elephants come looking for food, but above all for rice-beer, of which they are extremely fond. Our neighbours had great damage last year.'

Finally, in Lokhra village, near Guwahati, we visited a house-compound where a Karbi joint-family of 12 persons lived (D. 022). 'Living in the plains, away from their homeland and because of lack of wood, these Karbis build their houses in the Assamese style, not on a platform,' we were told. The compound was subdivided into sections of garden with betel-nut and jackfruit trees and courtyards with several buildings on earthen plinths 50-60 centimetres high. A couple and their children lived in one house; in another the man's sister lived with her husband and children; grandpa lived in a third house (with a temple-annex); and finally in a fourth, small house the older son. They were Hindus. The house construction was wood, and most of the roofs were covered with jungle grass, though a few smaller ones with metal. The walls were made of woven bamboo and plastered with mud.

The man showed his own house, which was divided in a living/sleeping room and a room for cooking and making rice-beer. 'We're famous for beer making,' he said and offered us a glass of beer. But we didn't like the taste much, which reminded us of a drink made from the *mahua* flower in central India. After many thanks and saying a kind goodbye, we left.



D. 021: Karbi house with tree-house, Keroni – plan and views.



D. 022: Karbi house, Lokhra – plan and section.

HILL TIWA (HILL LALUNG)

Overview

Hill Tiwa villages are mostly situated in clearings in the forest, with houses and fenced yards facing each other in two rows along the village road. The houses are on an earthen platform, with a small veranda in front, which is used for weaving and storing bamboo water containers. Generally the house consists of three rooms: (1) *nomaji*, a guestroom with a fireplace, (2) *nukhti,* a living room with cooking fire and (3) a storage room.

The dormitory (*dekachang* or *dekasang*) is used for the young men's association of the village (*samadi*) and as a meeting place for the village council. It is the sleeping place for unmarried boys (aged 5 and older) and sometimes also for guests. The woodcarvings of female breasts on the horizontal connection beam signify that the dormitory is forbidden for girls. A central big post and seat is for the head of the boys.

Houses have walls of mud plastered bamboo, a one-foot high earthen plinth and a thatched roof, plus bamboo fencing with a gate. The large dormitory is constructed with beautifully carved wooden posts. Inside are two fireplaces and wooden benches for sitting and mats for sleeping.

Commentary

In Krokendang village, we passed a woman weaving a colourful cloth. An old blind man sat on a low stool and said, 'If you want to see a beautiful dormitory you have to go to Amdoba, a bit further down.' We followed his advice.

A footpath took us to the village, which had some 500 inhabitants, and a nice young man was willing to show us around. Sushil didn't understand the Hill Tiwa language and the people there scarcely spoke Assamese. What we understood was that they call themselves 'Hill Lalung Douar Amla,' which was the name of the young men's club.

The man took us to the impressive dormitory (D. 025, P. 038 and P. 039), which was built on a raised platform accessible at the front and rear by heavy wooden logs with hewn-out steps. The thatched roof was supported by round wooden columns, of which the middle one was beautifully carved. The connection beams were ornamented with women breasts and painted with abstract motifs and images like an airplane and a train.

On the springy bamboo floor rolled-up sleeping mats and blankets lay neatly along the side. Boys from 5 to 6 years old and young unmarried men were sleeping around the two fireplaces which burned at night. For a photo one of the fires was kindled, and the boys and men sat on the benches on the sides.

On the central horizontal roof beam lay several drums, long and short ones. Branches with withered leaves were stuck on the inside of the roof, which our driver Sushil said he had also seen near the kitchen in one of the houses. When I looked through the small gaps in the floor to examine the round wooden beams supporting the floor, the men nearly broke open the floor for me. I told them quickly that I had already seen what I wanted to see.

In the meantime the whole village had run out to see what we were doing. The headman arrived and, concerned, asked what I was drawing. I attempted to explain and showed him my book with drawings in 1996, including some of the Karbi village of Rongmandu. They knew it and pointed in its direction.

The boys slept in the dormitory but ate at home with their parents. There wasn't a mentor-like figure who taught the boys, as in dormitories of other tribes, but of course they had a school here.

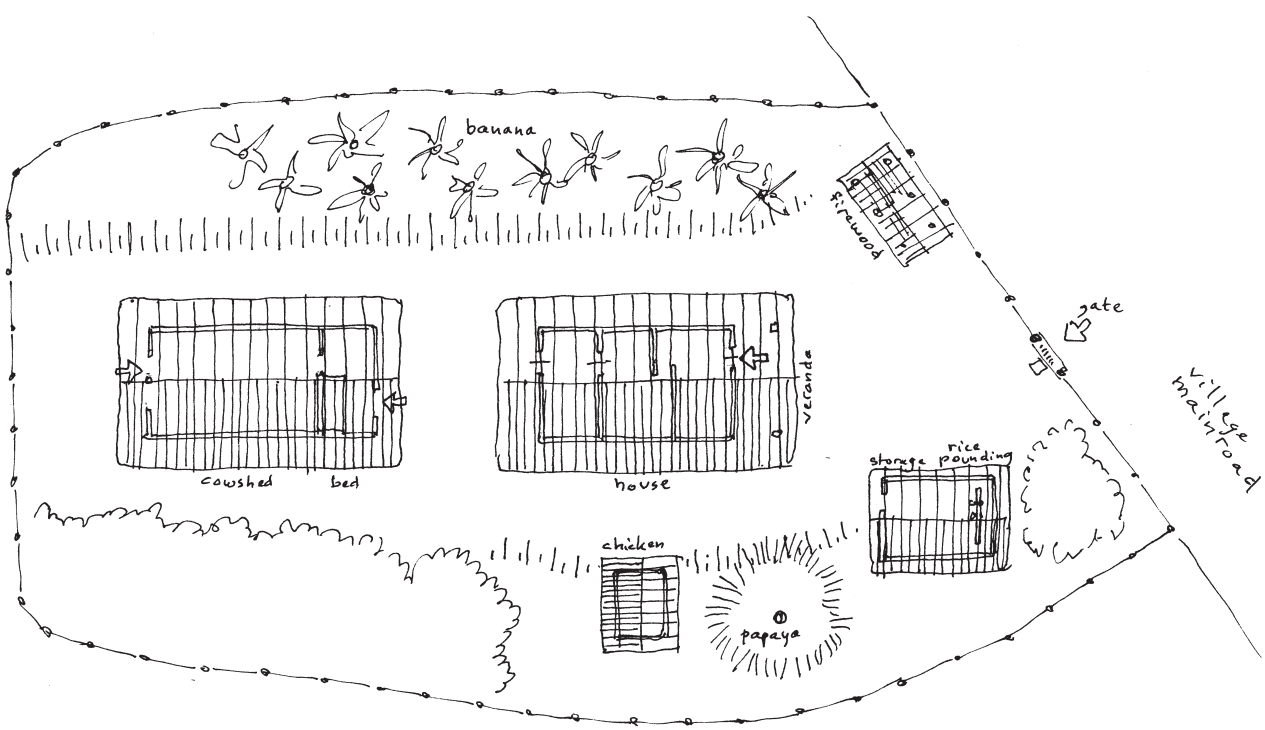
The three thick middle columns represented deities, we were told. Sometimes they sacrificed to these deities. The ornaments on the columns and beams were all made by a man in the village. All main columns, the ridge and main purlins were made of heavy, round wood, while the wooden collar-beams were rectangular. The other floor and roof beams and the thin columns were bamboo; the connection laths for the thatch were split bamboo; and the floor cover was made of split and flattened bamboo. All connections were made with split bamboo.

It was too late to visit one of the houses. We planned to come back the next day. When we said goodbye, a large circle of villagers gathered around us.

P. 034: bamboo fence with gate, Hill Tiwa house, Amdoba, 1998.

P. 035: Hill Tiwa children on their way back to the village, Khawragaon, 1998.

P. 036: veranda of Hill Tiwa house in D. 024, Amdoba, 1998.



D. 024: Hill Tiwa house, Amdoba – plan.

We descended into a valley with barren paddy fields and some bungalow-type houses. Some of the wooden bridges we crossed had a warning sign: 'weak bridge, drive slowly.' The brush was burning in many places in the forests, and everywhere we saw small fires. A man with a smouldering bundle of grass and leaves on a stick kindled the fires. The sun was setting blood-red as twilight fell.

The next day started cold. The temperature was only a few degrees above zero. After bathing in our Inspection Bungalow with ice-cold water, we were able to tolerate the cold. We went to another nearby village, Khawragaon, which, according to the watchman, had a dormitory. It stood on the village square, across from a small school and a strange factory-like new construction. The dormitory (P. 037) looked identical to the one in Amdoba (D. 025), only the entrance stairs lay in the opposite direction.

A group of boys sat at the front on and near the staircase. The young-men's club which owned the dormitory was called Amri, we were told. The building was very beautiful, with heavy columns and a raised platform. The three deity-columns were especially impressive. Also there were two fireplaces with benches around and many rolled-up sleeping mats. Drums sat on the roof beams, while bamboo cross flutes stood in big bamboo containers against the middle side column.

A rope hung from the central column. It had been originally used to drag the heavy column but was now used to hang things, like the bamboo container filled with drinking water.

We were horrified to hear that the new construction of steel in front of the square was going to replace the present dormitory. In the course of time the old dormitory would be made into firewood. 'The deities can be brought over from the old columns to the new ones,' they assured us.

When a group of boys is promoted to the 'senior' level, which happens after a six-year apprenticeship, the existing dormitory must be demolished and a new one constructed. And with the government prohibition on cutting big trees and therefore a lack of heavy wood, they had to build in steel. Unfortunately they didn't reuse the wood from the old building.

A woman passed by with bamboo containers for drinking water and disappeared along a footpath. We followed her for some distance, to the spring, where we saw children bathing and women doing the washing. They were very shy. Bamboo containers leant against a stand, ready to be filled. Later we saw three children on their way back to the village (P. 035) after collecting water from the spring and vegetables from the field. The first child carried a basket, the second a bamboo water container and the third her little brother or sister.

Back in the village square we were told, with a hint of threat, that 'unbelievers aren't supposed to go into the dormitory.'

To avoid problems Sushil told them that I was a Hindu; people here also pretended to be Hindus. With a little laugh, they said they worship the goddess Durga, represented by the three columns. The ancestral beliefs were followed, alongside the newer, Hindu ones. Supposedly Durga represented the earth goddess of the tribals, but we doubted they were Hindus. There was no Hindu temple here or in Amdoba. Maybe they didn't want to admit their animism.

Up a steep path we came to Amdoba and set foot on the square in front of the dormitory. The same man who welcomed us the day before came to us with a broad smile. The main road went up between yards fenced with high bamboo (P. 034) and a gate. To keep animals from getting out, the gate had a high threshold and lintel with hanging bamboos that made a 'kling-klong' sound when something passed. Stepping stones facilitated getting through the gate, which could be closed with a horizontal stick.

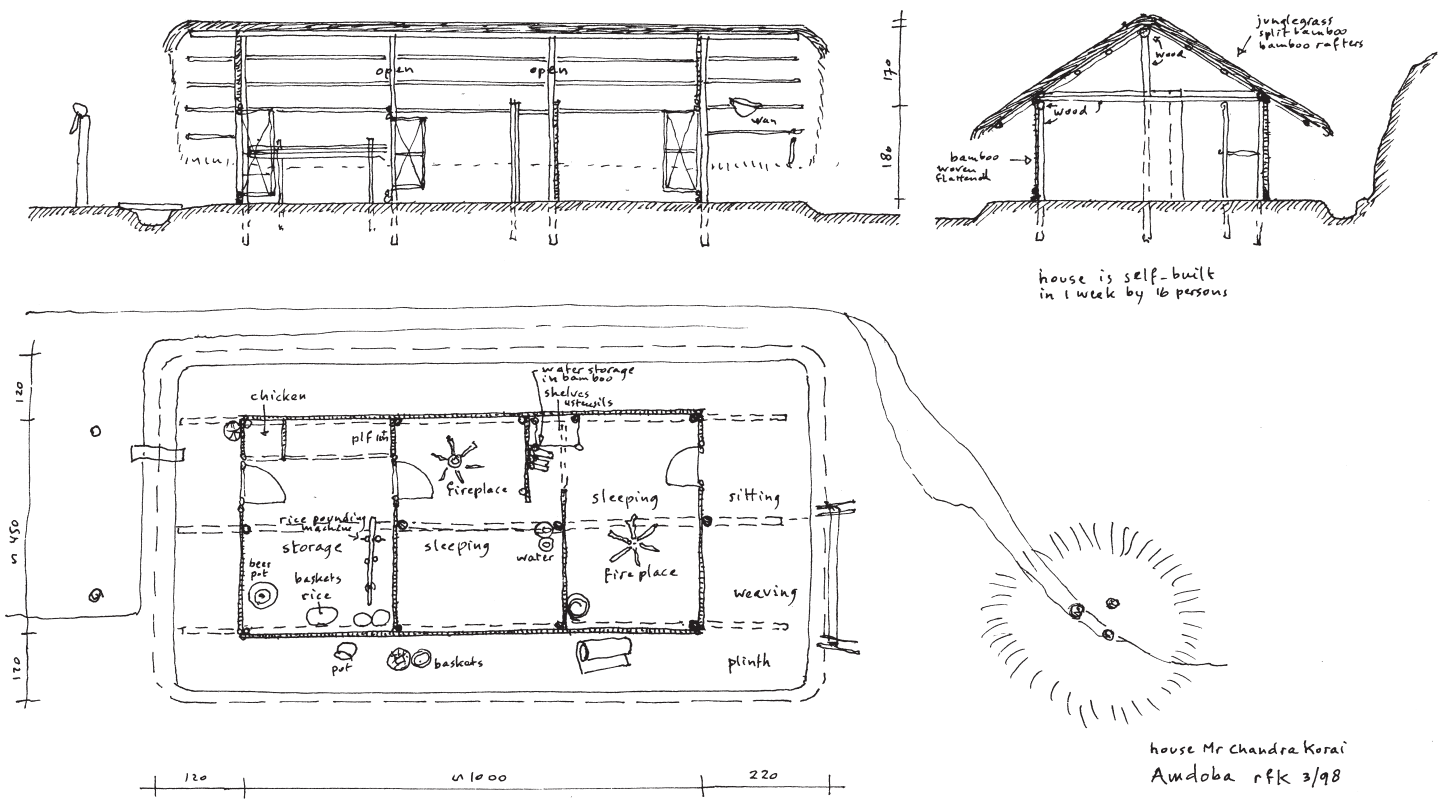
We arrived at a large yard, owned by Mr Urposhi Myti. Going through the 'kling-klong' gate, we saw that the yard contained several buildings (D. 024), so the owner would be a comparatively prosperous man.

In front of us was the private house with veranda, front room, middle room and back room, with an overhanging roof on all sides. The veranda was used as an outside living room and working place to make baskets and to weave. The spaces at the side under the roof ends served as storage for baskets and pots. The storage at the right side of the front yard was for firewood, and bundles of bamboos cut at equal lengths lay neatly piled. The left side was for storing and pounding rice.

At the back was the chicken coop, and a hen sat brooding in an open basket. Behind the house stood a building with a stable at the back and a separated room on a platform as a sleeping place in front. The yard was surrounded by a high fence. Banana trees grew on the higher part of the yard, and on the lower part a papaya tree, some bushes and other trees.

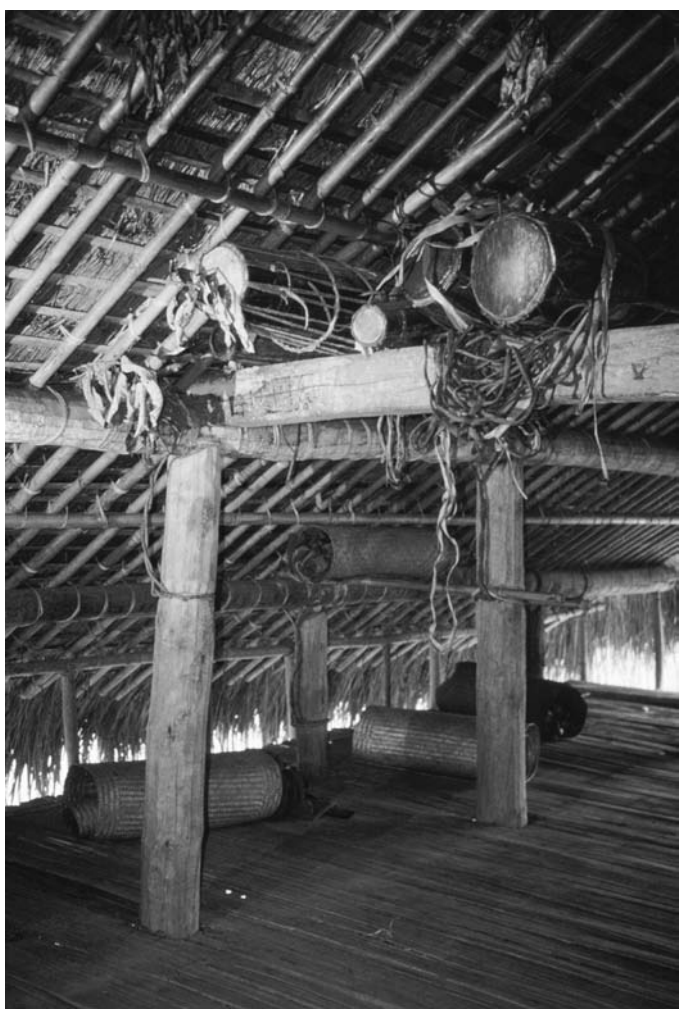
On the front veranda the family was busy making baskets (P. 036). Sitting together, we heard that the deity of this village was 'Thalia,' represented by the three middle columns of the dormitory, while the

P. 037: Hill Tiwa male dormitory (*dekasang*), Khawragaon, 1998.

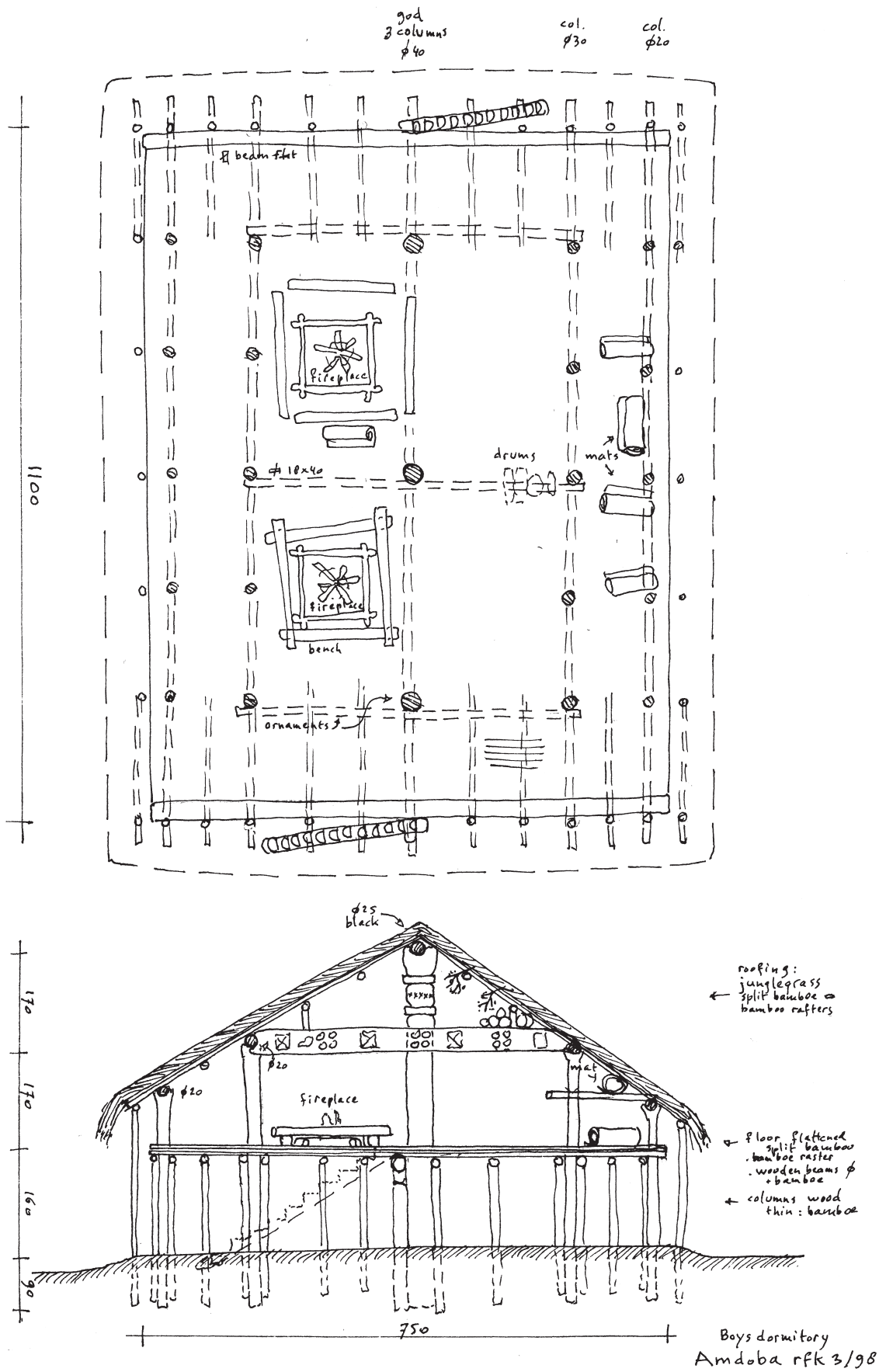


D. 023: Hill Tiwa house, Amdoba – plan and sections.

P. 038: woodcarvings, Hill Tiwa male dormitory in D. 025, Amdoba, 1998..



P. 039: interior, Hill Tiwa male dormitory in D. 025, Amdoba, 1998.



D. 025: Hill Tiwa male dormitory (*dekasang*), Amdoba – plan and section.

columns were 'like a lingam' (the phallic shape of Siva).

Our friend, whose name we discovered was Chandra Korai, took us along small paths to his own house (D. 023). It looked exactly the same as the house of Mr Myti (D. 024) and was partitioned into three rooms, one behind the other. But here the annexes were missing and two families lived in the house. Also the small yard was not fenced.

They didn't have any cows or buffalos. 'Poor people pull the plough themselves on the paddy fields, two in front of the plough and one steering. Only rich families plough their land with buffalos,' he said.

The first two rooms were living rooms, one for each family, and both had a fireplace for cooking and making beer. The third room was for pounding rice, storing food and other things, and one corner was sectioned off as a small chicken-coop.

The wall between the first two rooms was constructed so that one couldn't look straight through the house. 'We built the house ourselves, in one week with 16 persons, family and friends,' he told us.

The whole house stood on a raised earthen plinth about 20 to 30 centimetres high. The columns, driven into the ground, and the main roof beams were spars, while smaller columns and purlins were made of bamboo. The roof was covered with jungle-grass, which was bent at the ridge and tied with three split bamboos.

Mr Chandra Korai took us further down through the village. Lower on the slope stood a house with a funny-shaped bamboo chicken-coop and duck-decoy in the front yard. A few men sitting there asked us if we want some rice beer. 'Yes, thank you, but we want to pay for it,' we said, knowing it would cost them money. We wanted them all to drink with us and together we emptied the bottle. In the meantime we talked with them and they told us various things. 'The village has 29 houses and about 500 people. For weekly market we go to Amsoy on Monday and Pirsinguy on Friday. Pots are not made in our village, so we get them by bartering. From time to time a man from a neighbouring village comes with pots which we get by giving him rice.'

We asked also about tree-houses that we had seen in the neighbourhood and they replied, 'Oh, they are used to protect the fields and serve also as a refuge when elephants or tigers attack.'

In a teahouse a man spoke to us in English, having heard of our interest in Hill Tiwa villages and dormitories. He was a Hill Tiwa himself and wanted to tell us more. Hill Tiwas were definitely not Hindu, he explained, despite what they had led us to believe. 'They have their original ancestor beliefs and they worship deities in their own house.'

DIMASA CACHARI

Overview

Dimasa Cachari houses are rectangular and built on earthen plinths. They contain several rooms next to each other and have a front and back veranda with a storage space. The separated kitchen stands in the back yard, while the separated dormitory for unmarried sons stands in the front yard. The house has a construction of wood, walls of plastered bamboo and a thatched roof.

Commentary

In November 1996, we visited a Dimasa Cachari house in Khailam Disa, near Maibang, in the North Cachar Hill region of Assam (P. 040 and D. 026). The house was not typical, but was built in the Assamese style. The village was situated near a river and consisted of fenced compounds with houses on earthen plinths, overshadowed by scattered trees. The house was inhabited by one family of eight persons; the grandparents lived in the neighbouring house.

In the front yard we passed a dormitory where his unmarried son slept. 'The unmarried daughters sleep in the parents' house,' the house owner said. Through the front veranda we stepped into the living room, connected with two bedrooms on the side. When his wife entered, we went together to the big back veranda where her weaving-loom stood.

The man said, 'We built the house in one month with the help of family and friends, in total seven persons. About every twenty years the house has to be renewed because of termites. The roof cover we have to renew every three years.'

Looking into the back yard, we saw one part was used for washing, with loose lying wooden boards to prevent it getting muddy. At the right stood a separate kitchen and through the door opening I saw a mud-shaped double fireplace.

As I was making a drawing, Sushil warned me: 'You absolutely shouldn't step into the kitchen.' I said that I only looked around the corner. This wasn't true, but I remembered that some tribal people have rooms that strangers cannot enter and that when they do, the room is desecrated and has to be burned down and rebuilt. Later Sushil told me that in such cases the kitchen does not have to be rebuilt but only thoroughly cleaned and newly inaugurated.

The village headman then came and invited us to visit his house. The division was the same as in the first house. Sitting on stools in the living room, we drank rice beer and learned some words, including the special cloth worn at festivals which is called *rigampat remai*. Talking about this, the mistress of the house showed her festival cloth, which was really beautiful. The fabric had a row of strongly coloured bands with refined motifs.

For a photo she changed clothes and returned wearing the cloth wrapped around her hips and around her upper body a plain cloth with an ornamented border. I asked her to stand on the front veranda next to the weaving-loom on which she had woven the cloth – here also the light was right (P. 041).

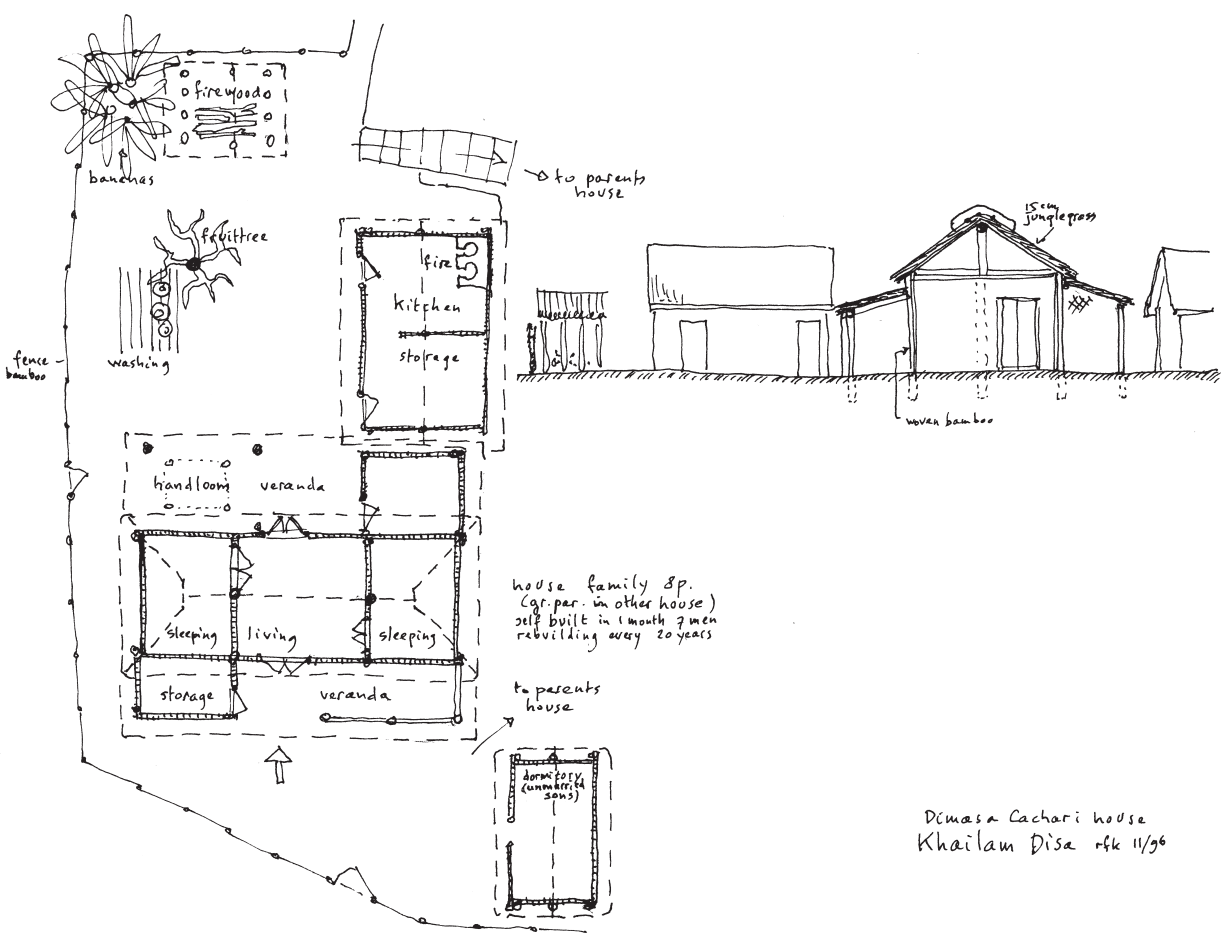
After taking the photo, we asked if we could buy the cloth. At first selling was out of the question since she used the cloth for festivals and owned no other one. She said, 'It costs me two months to weave such a cloth.' She used a fixed price per band—so there was no discussion about the price.

The cloth was made of cotton and very finely woven. 'The coloured cotton threads I buy in the market, in the traditional colours,' she explained. Apart from the bands, which ran the length of the cloth, the cloth had small geometrical figures. 'The shape and the motifs are characteristic of the Dimasa Cachari tribe,' we were told.

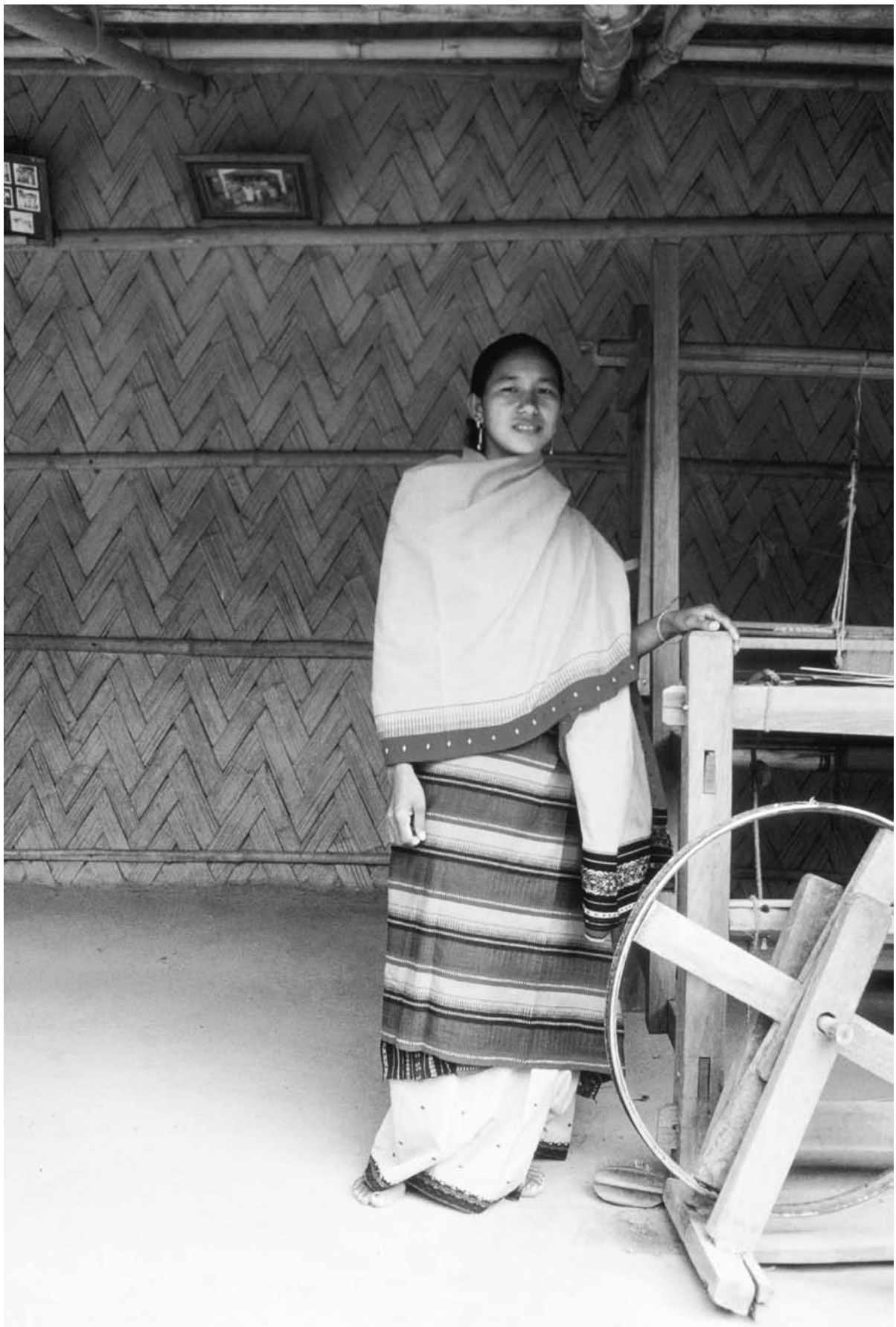
Still she didn't want to sell and came out with all kinds of arguments: 'It is for my own use. I didn't make it for selling. It has been used already and washed.' But with all these we had no problem; it was even good it has been washed, because later it would not fade so much. She explained that washing had to be done in cold water, without soap.

Then she showed us another, less beautiful and narrower cloth; after a long discussion on the back yard, she finally was willing to sell. We also bought another nice purple cloth with woven-in edges. In the meantime several bottles of rice beer of a high quality were emptied. We felt refreshed but a little tipsy. We thanked them for their kindness and hospitality and left. In spite of the rice beer, Sushil knew the little winding roads through the paddy fields and piloted us back safely.

P. 040: Dimasa Cachari house in D. 026, Khailam Disa , 1996.



D. 026: Dimasa Cachari house, Khailam Disa – plan and section.



P. 041: Dimasa Cachari woman wearing festival cloth, 1996.

ZEME NAGA

Overview

Zeme Naga villages are usually situated on a hilltop or a slope, with houses along both sides of the village 'street.' Sitting platforms are found in most villages, while granaries stand at some distance from the village. Houses are built on ground level with a low plinth and typically consist of three rooms, one behind the other: entrance room, main room (with fireplace for cooking and making rice beer) and sleeping room. There is also an open front veranda and a closed back veranda.

The male dormitory (*hangseuki* or *morung*) is for boys aged eight years or older. It is a very big house, high and wide in the front, low and narrow at the rear. At the front the overhanging roof provides a sheltered entrance and place for sitting. The front is decorated with woodcarvings. In the large hall are one or two fireplaces, wooden benches for sitting and sleeping, timber posts decorated with heads of mithun, buffalo, deer and boar. The housekeeper (who owns the house) and his family live in the back part. The girls' dormitory (*leoseuk*i) is actually an ordinary house that the girls select, usually a house of an old couple, who then become the guardians and live in the back. Each village has two or three dormitories of each type.

House construction is of wood, while the wall covers use woven flattened bamboo; the floor is clay and the roof is thatched. All joints use cane. No iron is used.

Commentary

Following small winding roads, and accompanied by Mrs Evelyn, a teacher, we arrived in Boro Haflong, a Zeme Naga village in Assam. The road divided the village into two parts. Mrs Evelyn said, 'About 95% of all Nagas are Christian, like me. In one half of this village live Zeme Nagas converted to Hinduism, and in the other half those who've converted to Christianity.'

In the Christian part all the houses were modernized and there was no dormitory. In the (so-called) Hindu part of the village also the houses were not traditional. 'Still, there is a beautiful traditional dormitory,' Mrs Evelyn said.

In the ethnographic literature, a male dormitory is almost always called *morung*, but here they used the term *hangseuki*. The building was really marvellous (D. 027, P. 042 and P. 043). 'In 1994 it was completely rebuilt in the original shape and materials. This happens once every few years,' she said. 'However, the dormitory is not functioning as before. Mostly the boys don't sleep here anymore, and now it is used more as a place for important meetings and as a guesthouse.'

The front was ornamented with woodcarvings. Some villagers were sitting on the bench under the overhanging roof (P. 043). Next to the entrance on a big flat stone lay a large drum. 'It is used to call people,' they explained and let us inside.

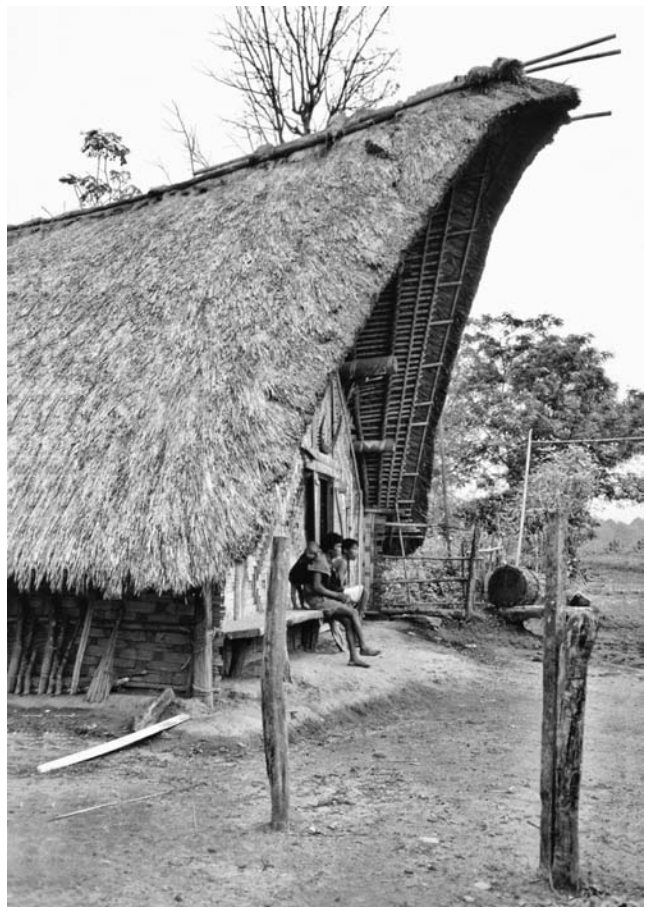
The building consisted of a large hall with a separated back part. In the hall there were long benches around the fireplace and along the side walls. 'In former days the boys slept on them,' they said. The back room had a second fireplace with three stones and served as kitchen. Utensils, such as brown smoked gourds for ladling and drinking, were stored on the rack suspended from the roof above the fire. The kitchen was a modern development; traditionally the housekeeper lived in the back part of the dormitory.

This male dormitory had been built on the ground, but from the front to the back the building sloped down and got narrower. Also the construction was beautiful: shining round wooden roof beams, middle columns and flattened side columns, joints of roof construction with supporting columns (P. 042) and a carved post on the middle roof beam with attached buffalo skull.

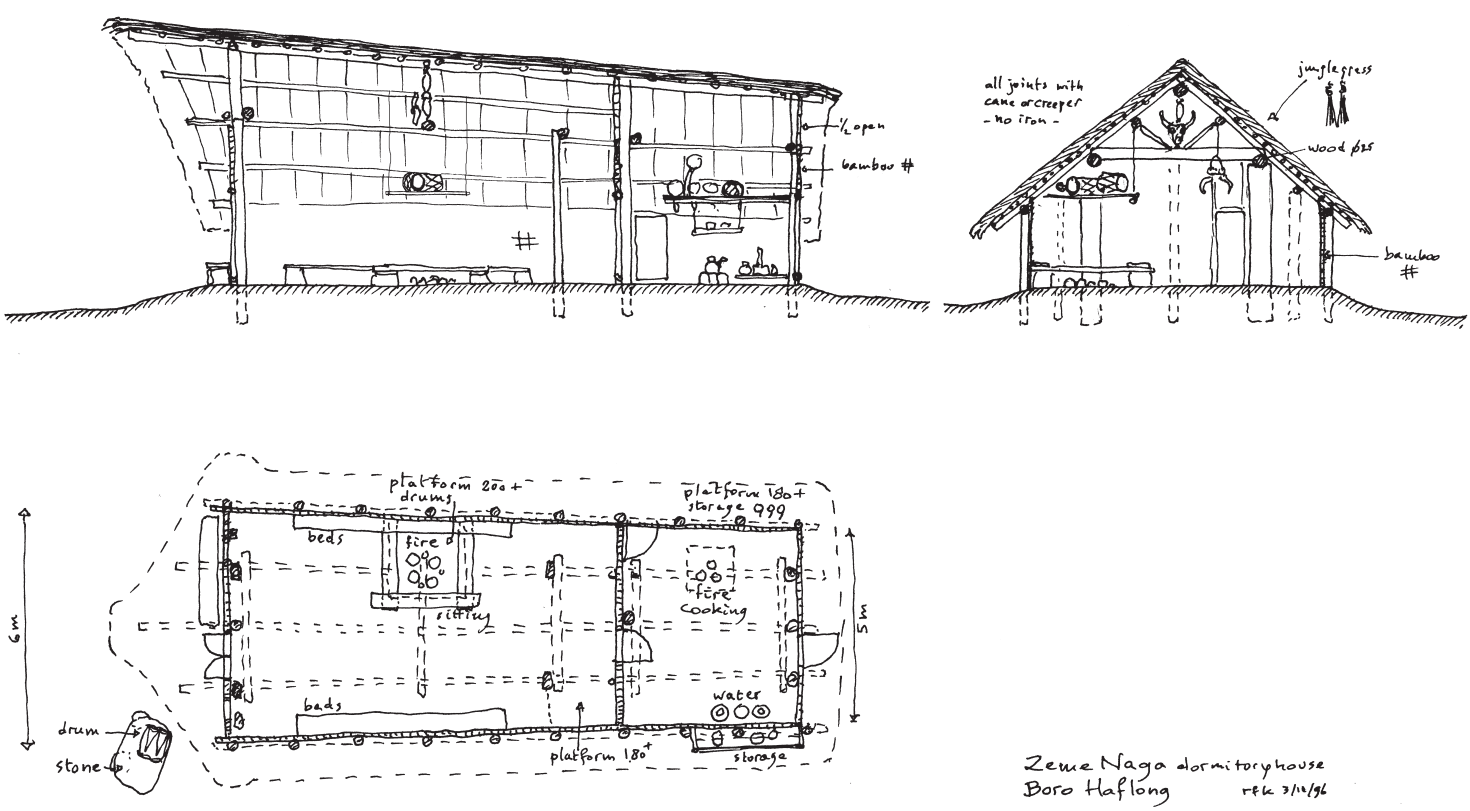
A second skull hung upside down on a rope, with the tips of its horns shining. 'This one,' said Mrs Evelyn, 'is used by the boys to do pull-ups, as physical exercise.' The walls were made of woven, flattened bamboo, and the roof was covered with jungle-grass.

We were told that Boro Haflong had some 70 to 80 houses and about 500 people, not 800 as I had thought (thinking an average family would have had 10 people). 'Here people follow family planning on a voluntary basis,' they said.

P. 042: detail roof joint, Zeme Naga male dormitory (*hangseuki*) in D. 027, Boro Haflong, 1996.



P. 043: Zeme Naga male dormitory (*hangseuki*) in D. 027, Boro Haflong – see also front cover, 1996.



D. 027: Zeme Naga male dormitory (*hangseuki*), Boro Haflong – plan and sections.

On the day we wanted to visit the village of Laisong, a nice Zeme Naga woman who had been ready to join us became ill, so she sent her two brothers with us. We travelled a long way winding up and down high mountains. Not far from Laisong we looked down and saw a valley with the wonderful twisting lines of paddy fields on terraces (P. 051).

Laisong, like Boro Haflong, had two separate parts defined by religion. The original village lay above on a mountain ridge, with the modern village lower on the slope. Most Zeme Nagas in the upper village had converted to Hinduism (they said), while in the lower village they had embraced Christianity. The road ended in the lower village, where we left the car near the wooden church.

The upper village could be reached by foot only—after a tiring climb. The footpath went up through bushes and overhanging bamboo, offering some shadow in the heat. In a curve of the path we looked down on the Christian village.

We entered the upper village near the male dormitory (D. 028, P. 045 and P. 047). Some villagers stood there waiting for us, and after the two brothers introduced us, a few were willing to show us around. At first sight, the houses along the road going upward from the dormitory looked like the dormitory itself, only smaller in dimensions (P. 050 and P. 052).

The houses were built on an earthen plinth with wooden columns and walls of woven, flattened bamboo, while the roofs were covered with jungle grass. Walking along we met a woman carrying firewood in a basket on her back (P. 046), and she seemed pleased to see us. The village headman passed by and welcomed us, too (P. 049).

The villagers pointed to a second dormitory, higher on the village road, which stood (like the nearby houses) at right angles to the first dormitory and houses (see village plan in D. 028). 'Near the second dormitory is a house functioning as Hindu temple,' they told us.

Both dormitories, with slanting roof hanging far over at the front, looked like the one in Boro Haflong (D. 027). But here the use of the back part was different. 'The housekeeper and his family live here,' they said. 'The housekeeper is also the boys' mentor.'

Entering the large front hall of the first dormitory, we looked at the fireplace, long benches and a hanging platform for storage of drums. 'For the young unmarried men the dormitory functions mainly as community hall or club house,' they said. 'They sleep here in fact only during special ceremonies or in case they choose not to sleep at home.'

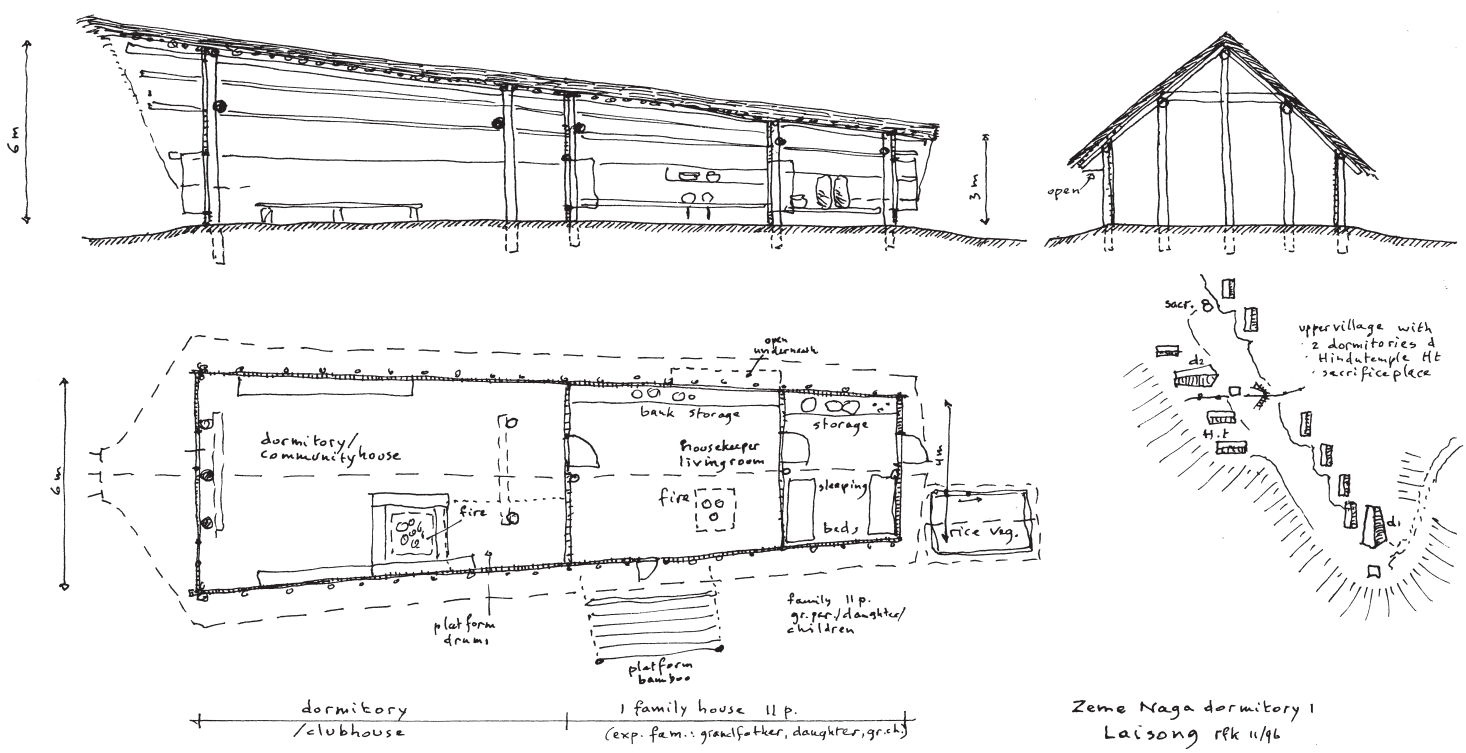
P. 044: entrance to male dormitory Boro Haflong in P.043, 1996.

They opened the door at the back for us and we stepped into the housekeeper's house. 'A large family live here,' they said, 'consisting of grandfather, daughter with husband and children, 11 persons in all.' We were in the living room with fireplace, and at the right side was a door to a terrace on a bamboo platform. Behind the living room, we saw a second room for sleeping with a door to the yard, and just behind stood a granary.

To reach the second dormitory we had to cross a high fence, climbing up one set of steps and then down another. Beside and above the dormitory door, we saw plaited bamboo fixed with carved boards and a tie beam bearing an inscription of '1994', the year of the last renewal (P. 044). Inside, we realised that the ground plans of both dormitories were quite similar.

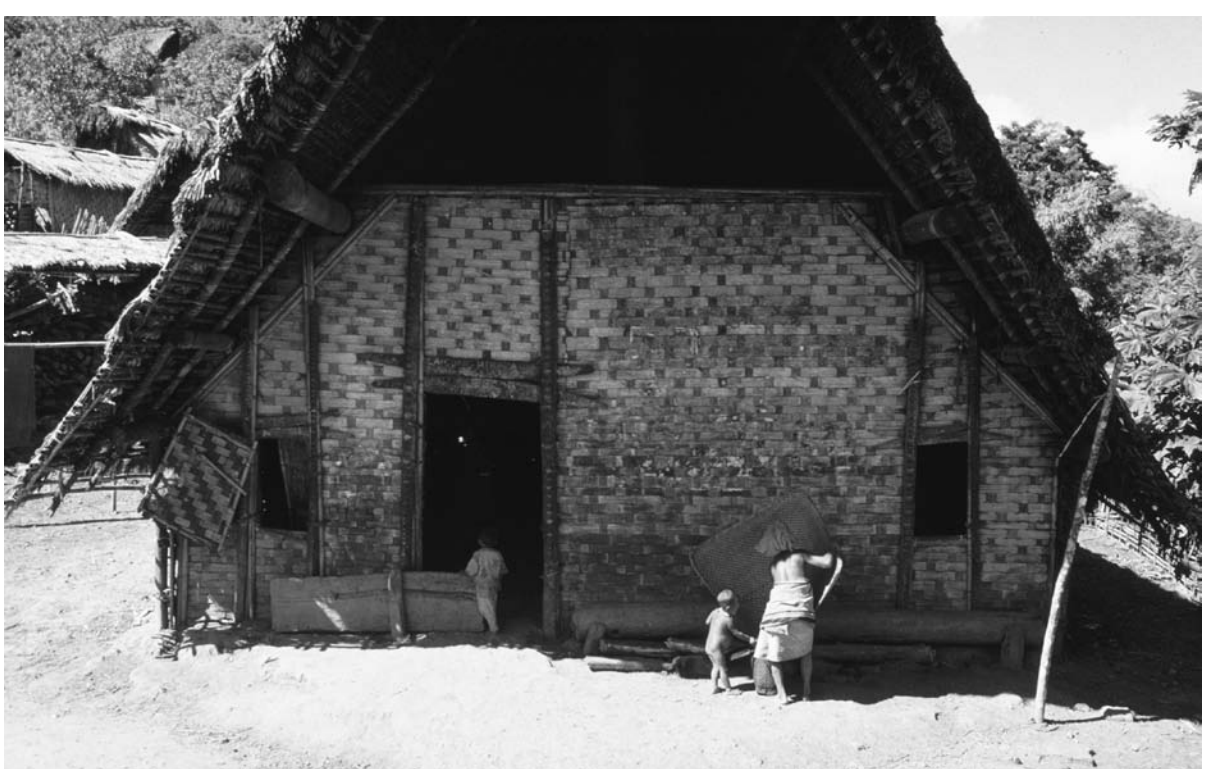
The Hindu temple standing near the upper dormitory didn't look much in use, even closed. Probably the people were not really converted to Hinduism. Still any shift from the traditional, more or less animistic belief to Hinduism was easier and smoother than conversion to Christianity.

P. 045: Zeme Naga male dormitory (*hangseuki*) 1 in village plan at right in D. 028, Laisong, 1996.

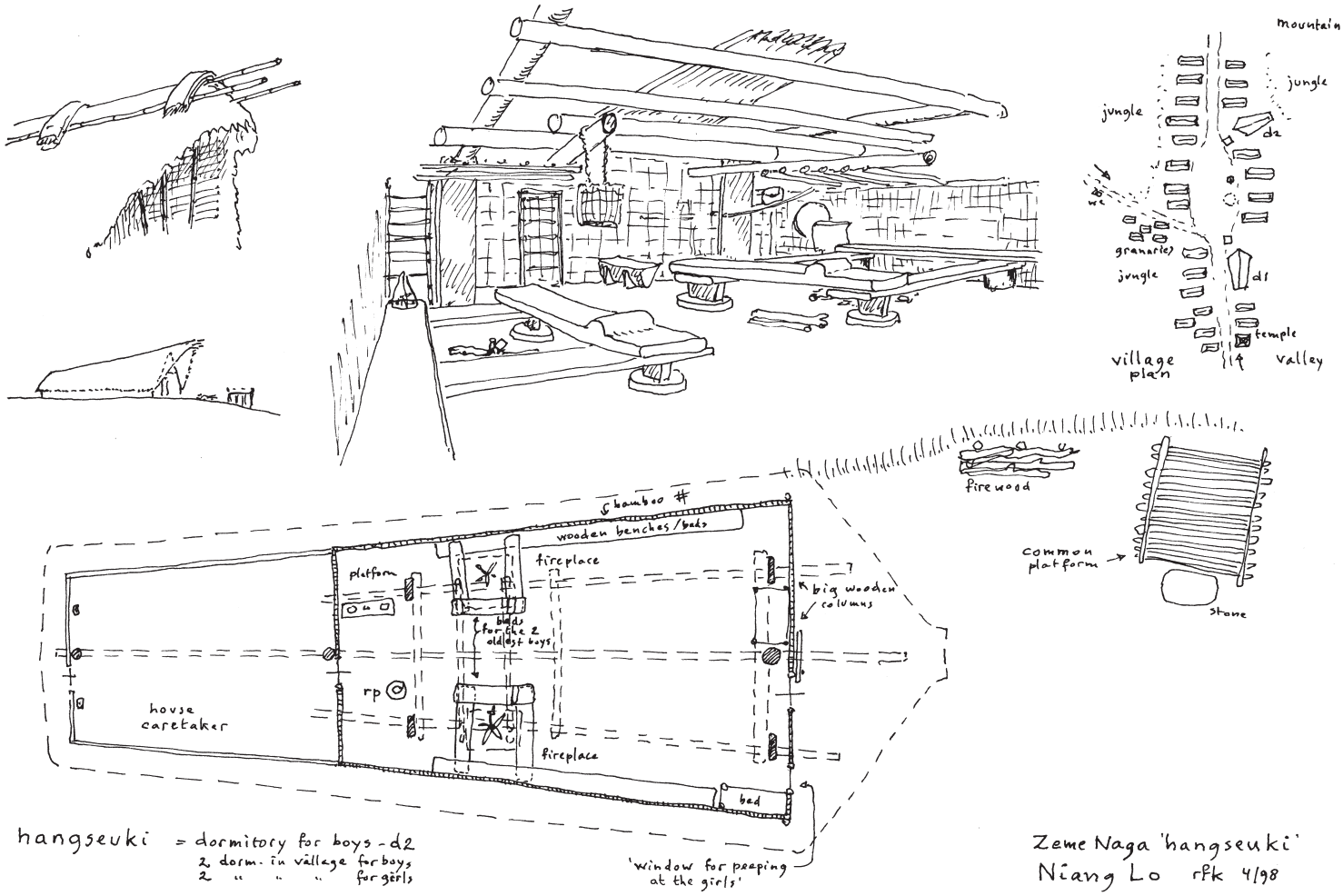


D. 028: Zeme Naga male dormitory (*hangseuki*), Laisong – plan, sections and village plan.

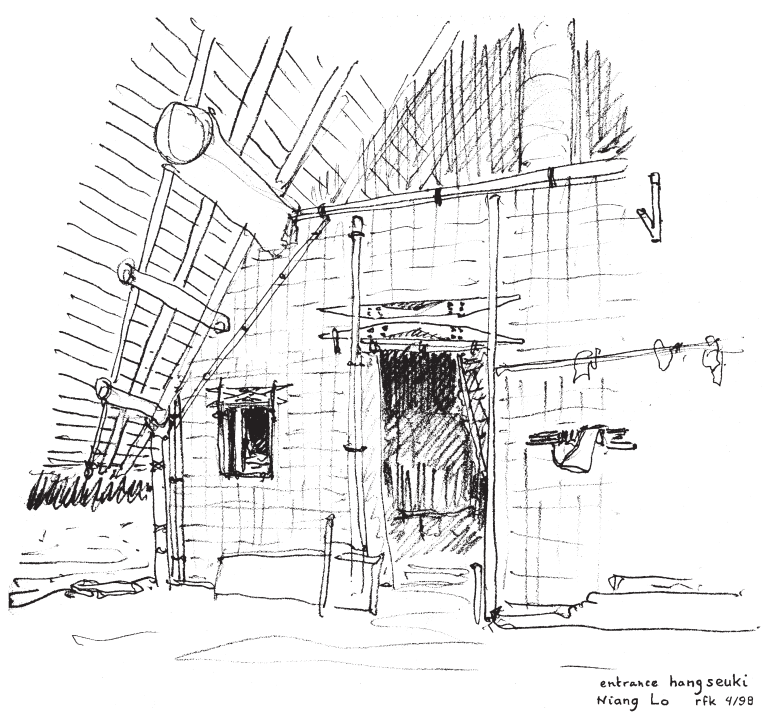
P. 046: Zeme Naga woman carrying firewood, 1998.



P. 047: entrance male dormitory (*hangseuki*) 1, Laisong, 1996.



D. 029: Zeme Naga male dormitory (*hangseuki*), Niang Lo – plan, views and village plan.



D. 030: Zeme Naga male dormitory (*hangseuki*) entrance, Niang Lo – view.

P. 048: Zeme Naga male dormitory (*hangseuki*) 2 upper right in village plan in D. 029, Niang Lo, 1998.

In any case, in the 'Hindu' village, the material evidence of the original culture, like the dormitory, the houses, the sacrifice stones, etc., were not, or not much, affected.

What was missing was the Zeme Naga village entry gate (*kharu*), though we saw something of this when we went back: two pieces of stone wall on either side of the road. Another village a bit further down had a wooden entry gate over the road, but it looked more functional, to prevent the passage of animals. Apparently, the gates were associated with spirits, for increasing fertility, but after conversion to Christianity they lost much of their ritual importance.

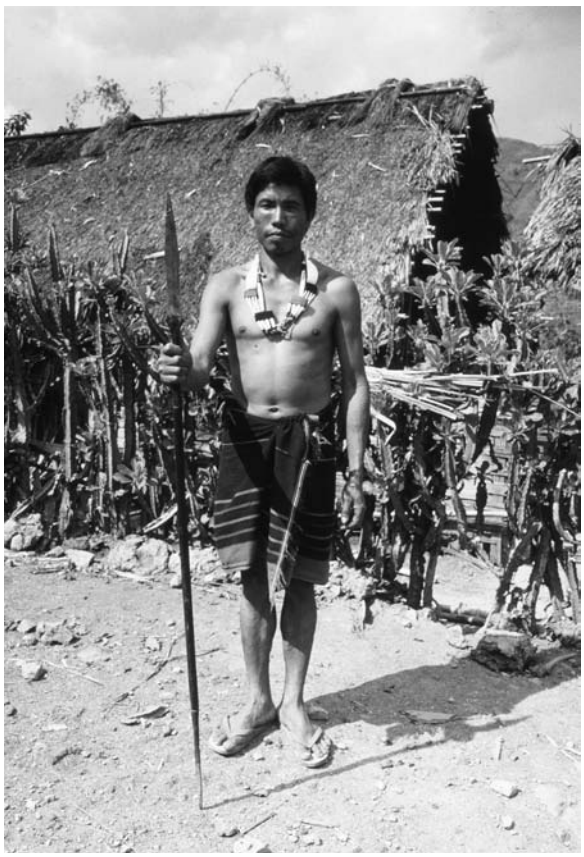
Two years later (1998) we visited Boro Haflong again, but the situation was tense, with soldiers everywhere. The government buildings in Haflong town were protected by piles of sandbags and watch posts manned by soldiers keeping their guns ready.

Wanting to visit Laisong again, first we tried to meet the Zeme Naga lady in Boro Haflong who last time sent her two brothers with us. This time she sent her daughter, Adua.

After passing Mahur and following the road to Laisong, a cobra 1.5 metres long shot out of the bushes across the road and vanished on the other side. The road wound endlessly upwards along the mountain slope.

Adua told us that the lower part of Laisong was Christian, which we knew already, and that the inhabitants of the upper part (in my eyes the original village) still hung on to the original beliefs, especially the god Tingwang. This is what I had thought during our first visit; telling us they were Hindu seemed misleading.

We arrived in Laisong and went straight to the upper village. Two years ago one of the dormitories had stood here, but it had broken down. Just the three central heavy wooden columns of the front were still standing—in the middle of a vegetable garden. The long ridge-beam lay along the village road, and the



P. 049: Zeme Naga headman, Laisong, 1998.

P. 050: Zeme Naga house and yard, Laisong, 1998.

P. 051: landscape with paddy fields, near Laisong, 1996.

P. 052: Zeme Naga house and yard, Laisong, 1996.

raised platform in front of the building had disappeared.

Without this iconic building, we had difficulty recognising the village. More changes were striking: the raised platform before the second dormitory had been demolished; some thatched roofs of the houses had been renewed with corrugated iron; some houses were rebuilt in the Assamese style, which was new for this village. And, in one case, an Assamese house had been built as a second house at the side of the front yard of the traditional house.

This last mentioned house we went to visit. Adua knew the people living here, including the owner Mr Gaing, so she introduced us and asked if I might see and draw the original house. They welcomed us kindly and showed us the house. The new house stood at the left side of the frontyard of the traditional house (D. 031 and P. 053). Next to the entrance in front of the traditional house the grandmother sat on a low stool, weaving on a back-strap loom.

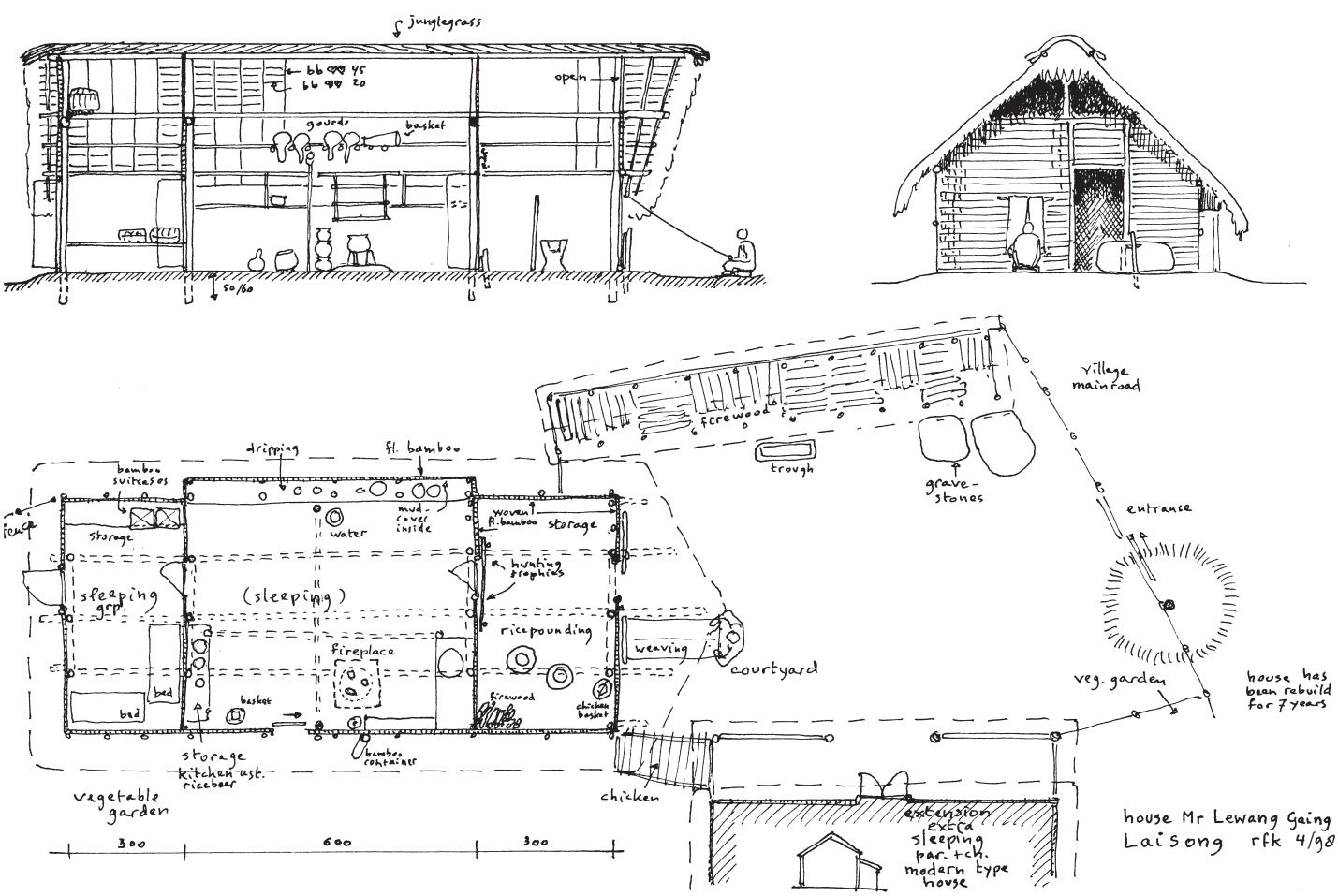
Sitting with her in the front yard we were offered two papayas; Adua cleaned one and the taste was deliciously fresh and sweet. Looking around, we saw a few large, flat stones in one corner. 'Those are the graves of their ancestors,' she told us.

The traditional house was built on a low earthen platform and consisted of three rooms, one behind the other. The front room contained the rice pounding mortars and the baskets in which the chicken were put at night. In the second room we were asked to sit on small stools round the cooking-fire; halfway along a side wall a door opened into the vegetable garden. They pointed at the hanging rack above the fireplace, which had more levels. The vessels on the floor were used for making and storing rice beer, while the kitchen utensils were put on planks fixed on the wall. At the height of one metre on the opposite wall was a rack for drying things and storage.

Opening the door at the back they showed us the bedroom for the oldest inhabitants, the grandparents. 'In former days the rest of the family slept in the central living room, with exception of the children more than ten years old—they slept in the dormitories,' they told us. 'These days the parents and children sleep in the new, second house at the left side of the front yard, but the boys and girls who really want to can sleep still in their respective dormitories.'

With the headman Mr Neuma, and some others who joined in, we walked through the village. Having followed the village road upwards as far as possible,

P. 053: Zeme Naga house and yard in D. 031, Laisong, 1998.



D. 031: Zeme Naga house, Laisong – plan, section and view.

they protested, 'There's nothing more to see.' But when I walked a bit further, I saw the village water-reservoir and higher on the slope a number of granaries on platforms, one for every household. They were built together uphill, outside the village because of the risk of fire; in case the village burned down, the rice supplies would be safe.

Going down to see the only remaining boys' dormitory (*hangseuki*), which we had visited two years ago, and pointing at a house lying lower along the village road, the headman said, 'There's also a *leoseuki* (girls' dormitory).' At first he was rather mysterious about it, as if such a thing didn't exist.

This is what we saw often—the dormitory system was strongly discouraged by the Government and Mission, especially for girls, so in the villages they had learned that it is much better not to call attention to these things.

We entered the girls' dormitory, which was just a common house (like the one in D. 031). Nobody was at home, and the door to the middle room was blocked. Mr Neuma explained that 'in fact this dormitory is a normal house, chosen by the girls themselves, usually one which is inhabited by an elderly couple without children. If they agree, they become housekeepers and stay in the back part of the house.'

People were also mysterious about being Hindus. They told us in 1996 that they were Hindus, but it looked like this was also pretence, a way of avoiding problems with the authorities who didn't want them to follow their traditional animistic beliefs.

We revisited the so-called Hindu temple, halfway up the village road. Inside the simple rectangular bamboo hall with thatched roof were rows of benches and at the back some steps rose as a kind of pulpit. The rest of the space was empty. No trace of Hindu worship, no lingam or god's image. When I expressed my doubt to the headman, I finally heard the true story.

The original belief, called 'Tingnasi', he explained, was mainly animistic and recognised a supreme god, Tingwang. Then a female mystic and political leader in Manipur named Radi Gaidinliu (deceased 1992) converted many people, including Zeme Nagas, to the worship of sun and moon, something like Donyi-Polo in Arunachal Pradesh. At a later date a second adapted religion was called Paupasi, and a third religion was called Heraka. All three belief systems were still current. With sun eclipses and full or new moons the gods were worshipped. So, the unconverted Zeme Nagas are not Hindus but they worship sun and moon, along with other gods like Tingwang, the head god, and Suhprai, the harvest god.

The stair-like pulpit in the temple served the prophet as a seat. 'The present-day temple is not in use anymore, and a new temple will be built at the dismantled dormitory's place,' he said.

A bit lower on another hill top, we saw an Indian army camp. I said 'the army village' and the villagers laughed. It seemed that every Zeme Naga village had an army camp, for protection, control and preventing possible subversive action.

Walking back to the male dormitory, we looked inside. Since our first visit in 1996 nothing had changed. The ornaments were still there, as were the drums on the roof beams, the fireplace, the benches and the door to the back house.

On our return, the road was blocked by construction work, and we had to retreat a little to let a bulldozer pass, before going on. The view into the valley was wonderful, with terraces of paddy fields and mountains all around. The drop from mountain top to valley I estimated as one thousand metres. In November 1996 the landscape had been even more beautiful, with the sharp green paddy fields. Now in April they were barren and stubbly, here and there watery and grey-brown. Buffalos were bathing in a muddy pool along one of the fields, and the bulging backs of the animals showed it must be a whole herd.

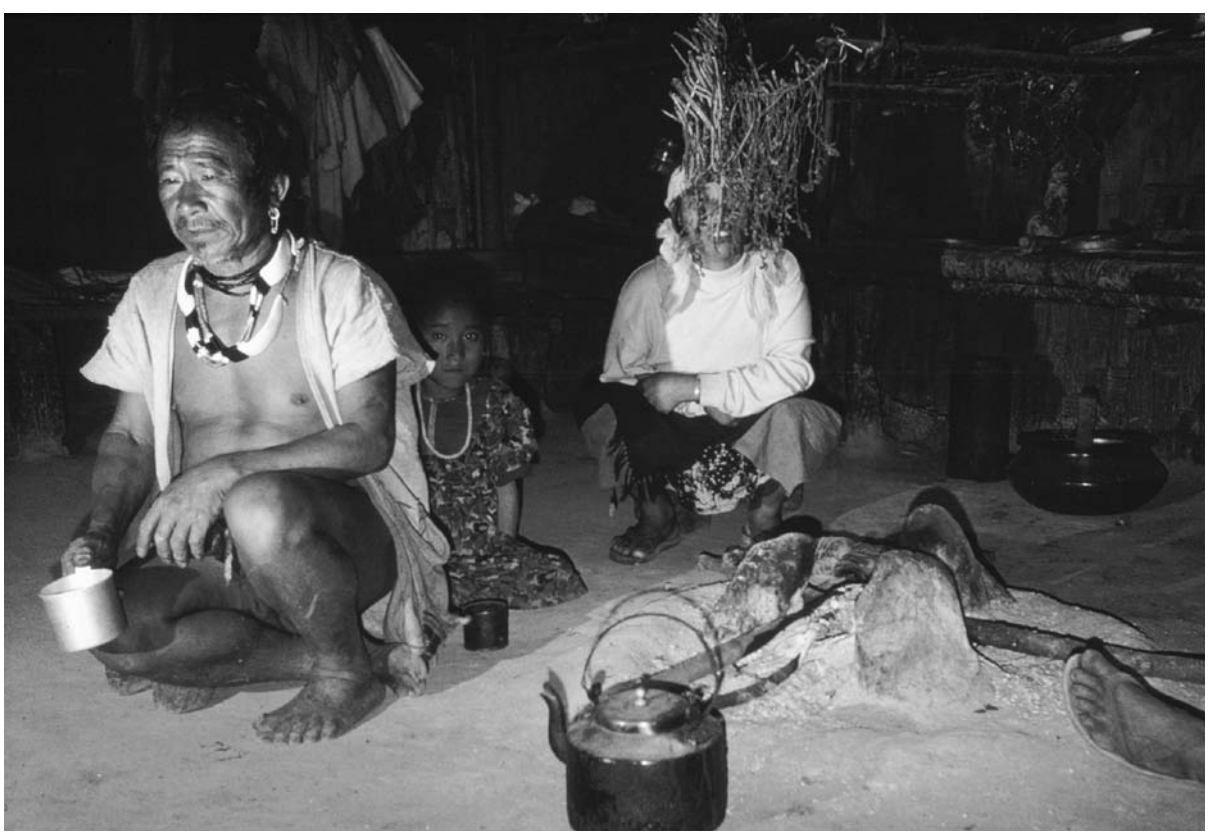
Much further and lower, before Mahur, soldiers were hidden in the bushes with machine-guns ready for use. Did they expect an attack of extremists or was it just daily precaution?

Some days later, we took a long walk through the forest in a light rainfall along a sometimes steep footpath to the Zeme Naga village of Niang Lo. We entered the village at the widest part of the village road and two boys whom Adua knew came to meet us.

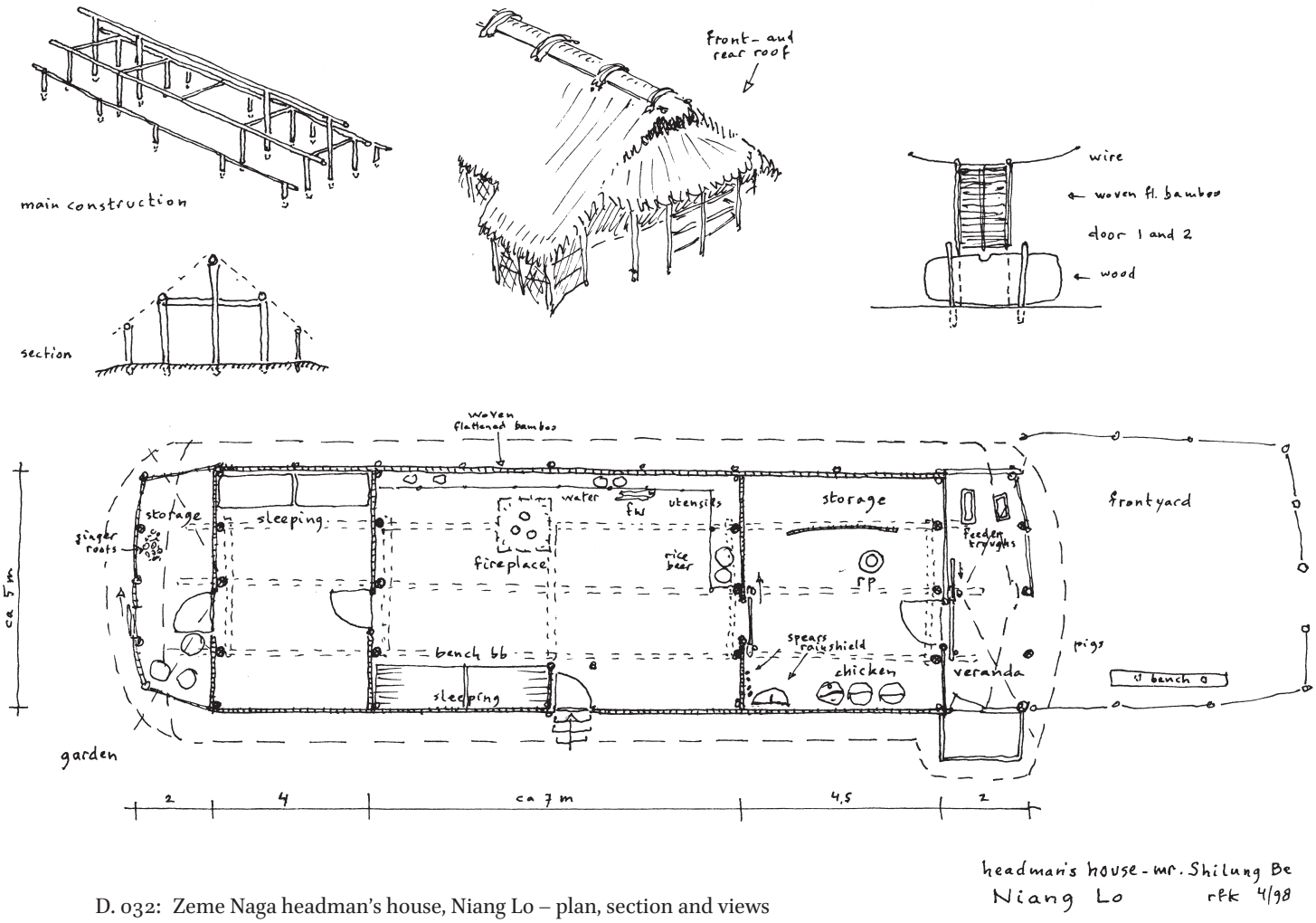
In front of us stood a male dormitory and a few young men straddled the roof ridge doing repairs. A ladder of bamboo poles with steps one metre apart lay on the roof surface. After asking permission, Sushil climbed up and a bit later, under protest from Edith, I did the same.

From the roof ridge we had a marvellous view over the whole village (village plan in D. 029, P. 054 and P. 057). A second dormitory stood a bit higher along the village road, the point of the front roof stuck high into the air. Near both dormitories a raised platform was used for meetings in the open air, or just sitting. Most houses had an open front veranda and a more or less closed back veranda; a long overhanging roof made them longer than the houses we had seen in

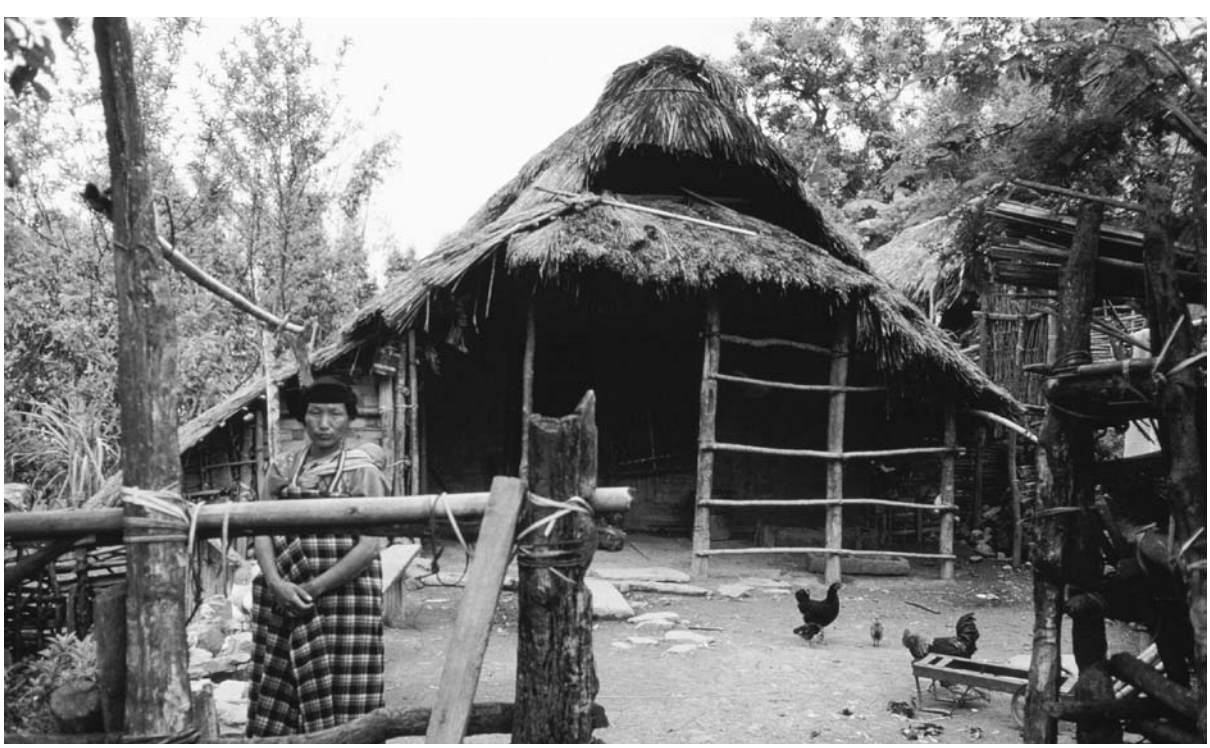
P. 054: Zeme Naga village, Niang Lo, 1998.



P. 055: headman next to his fireplace, Zeme Naga headman's house, Niang Lo, 1998.



D. 032: Zeme Naga headman's house, Niang Lo – plan, section and views



P. 056: headman's wife in front of her house in D. 032, Niang Lo, 1998.

Laisong. Most houses also had a fenced yard and were situated with their short front side towards the village road.

We looked inside the first dormitory. In the large hall were two fireplaces with benches; benches were also found along both side walls. The boys slept on these benches. Both benches along the middle passage had a raised head which served as a pillow. The two oldest boys, the leaders of the boys' community, slept on those special benches. 'That's because,' said one of the boys, 'in case of a sudden hostile attack or other emergency, immediately it is clear who the leaders are and the boys are ready quickly.'

The two dormitories, with their high roofs overhanging at the front, were still in use as dormitories. Clothes hang on bamboos and on lines along the walls. Mithun and buffalo skulls and horns hung on the tie beams in the roof construction. Niang Lo also had two girls' dormitories, which, as we had been told, were actually ordinary houses.

From the village road we stepped into the front yard of the headman's house. It was a long house and similar to the average Niang Lo house. The headman, Mr Shilung Be, invited us hospitably to sit round the fireplace. Sitting there, I showed him some of my drawings to give an impression of what I would like to do. He told me that a joint family of 16 people lived in the house, including his married son.

It had three rooms, one behind the other, and at the front and the back were verandas, the first open and the other closed. It struck me that the veranda roofs made the house look different from those in Laisong. Now and then I joined the others sitting around the fireplace to sip some rice beer, but in the meantime I made the drawings (D. 032).

The house was built on an earthen plinth, with the columns driven into the ground so that they were kept upright. The walls consisted of wooden posts with screens of woven, flattened bamboo. The roof was thatched with jungle grass, and the ridge cover was strengthened with bundles of jungle grass laid across it.

Entering from the front veranda one passed to the first and second rooms through striking doors: both had a massive wooden lower part sliding over the ground and a light woven, flattened bamboo upper part hanging and sliding along a thread fixed at the separation wall. With the upper part open, the closed lower part kept the animals outside. The second door was double, with a hinged door behind.

Feeding troughs for pigs lay to one side on the open front veranda, while the out-built sty was at the opposite side. The first room had a rice pounding vessel, baskets for chickens and a space for storage. Dangerously looking spears were hanging on the separation wall, and a rain shield stood against the side wall.

At the side wall of the central living room a door opened to the garden. The fireplace where we were sitting was also the cooking fire, and along the wall was space for storing utensils. At the opposite side wall were two bamboo benches for sitting and sleeping. The headman opened the door at the back and said, 'This third room is for the oldest members of the family. It's also the passage to the back veranda with storage and to the garden.' The back veranda had plaited bamboo walls and the door opened to a vegetable garden.

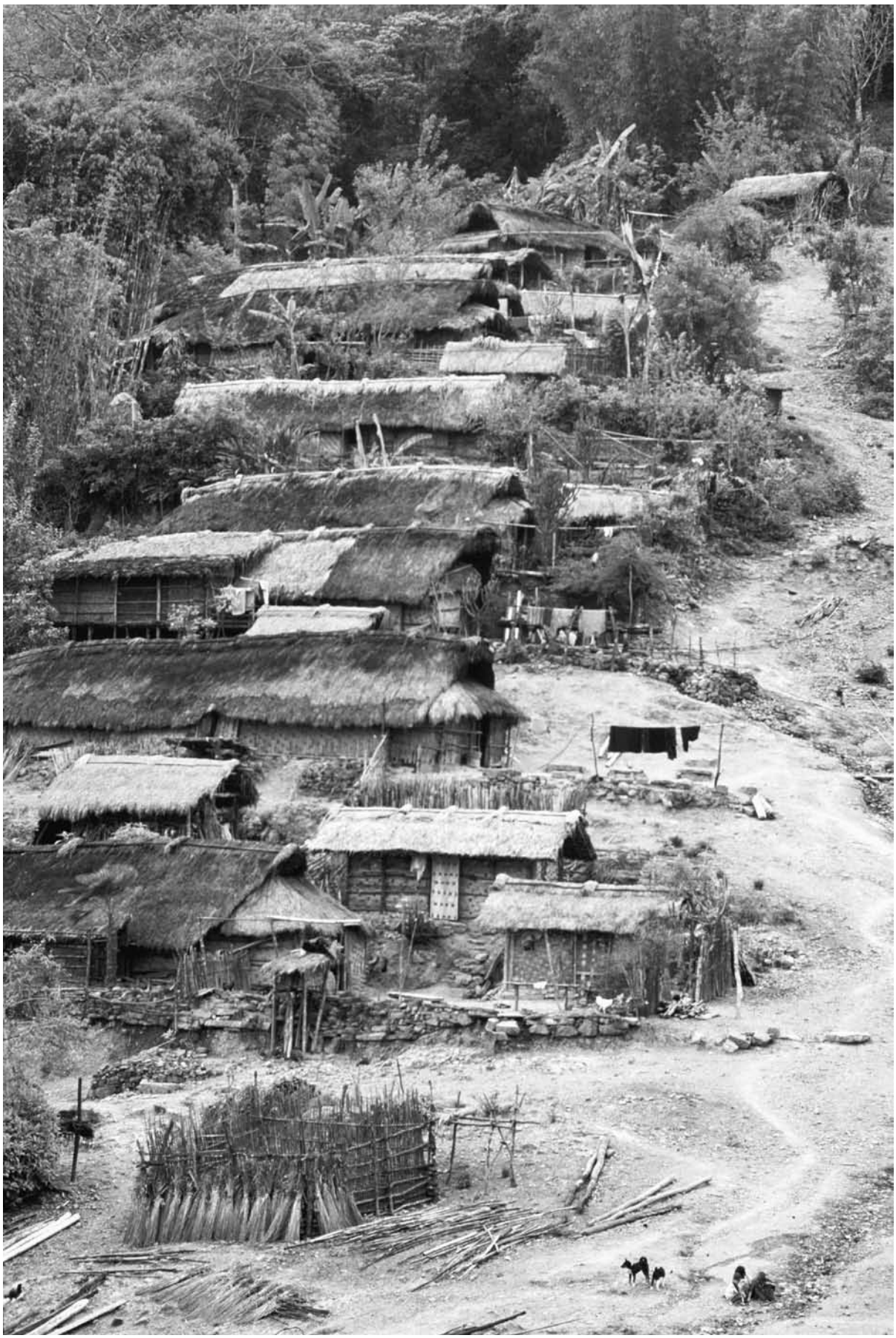
Then we sat again round the fireplace, tea was served and I took a photo of the headman (P. 055). After leaving the house and saying goodbye, I took a photo of our hostess bearing a child on her back and looking at us (P. 056).

Walking farther up along the village road, we entered the second dormitory. The building was lived in—clothes of the boys were around. On the roof beams snakeskins were hanging to dry. A few boys were there.

The plan of the two dormitories was quite similar. Here, too, were two fireplaces and long wide benches and two had the raised 'pillow' for the boys' leaders. 'We sleep on the benches, sometimes ten to twenty at the same time,' they told us. Here I made my drawings of the ground plan, interior, roof shape, impression of the entrance and a summary village plan with the two dormitories (D. 029, D. 030 and P. 048).

Down at the lower end of the village road, a small tower with a metal roof rose above the houses. 'That's the temple', they said and Adua added: 'In the temple the original religion called Tingnasi is followed.' It was too late to have a look there, which was a pity.

It was time to go because Adua had to be back in time. One of the boys walking with us back along the footpath was a flute player. The thunder-storm kept threatening, and big drops were falling, but it was still dry when we reached the car. With Sushil's knife one boy cut strips of bamboo to prevent our bottles of rice-beer from falling over as Sushil drove us home.



P. 057: Zeme Naga village, Niang Lo, 1998.

MISHING

Overview

Mishing houses are built in streets, orientated to the village road and (where possible) so that the front lies in shadow. Many are longhouses, with several families, each with a cooking fire. The houses are built on high poles, with an overhanging front roof, under which there is a veranda for sitting and an open space at ground level for weaving and pounding rice.

A few houses have separate sitting platforms at the side. Some kitchens are separate and connected to the house via a bridge. Some villages also have a dormitory that is now used for public gatherings, but this was not seen on Majuli Island. Houses use wood for poles and construction, and bamboo for floors and roof cover.

Commentary

After a complicated river crossing, we reached the town, or large village, of Kamalabari on Majuli Island in Assam. There we were required to report our presence to the authorities and then we got permission to sleep in the Circuit House in Garamur, some distance away but still on the island. To get there, again we had to take a ferry.

Our first visit was to the Mishing village of Kalitapar, the ancestral village of Dr Nath, whom we had met in Dibrugarh and was so kind to introduce us here. We drove a few kilometres over sand-dikes until we had to stop because off a broken dike. We walked the few remaining kilometres.

Dr Nath said, 'In former days there were no dikes and everywhere it was covered with jungle. Nowadays the land is more cultivated. Because of the sand-dikes constructed on the paths between the villages, the course of the Brahmaputra River has changed. That's why, in the summer the water rises higher and floods have become worse. Also the water remains longer on the island when the level of the river falls again.'

Government officers showed us, by pointing at the wall in their room, the height of the water in past summers: 80 centimetres above the floor. The previous summer it had been only 20 centimetres. 'With high flood even the dikes get under water,' they said.

Arriving at Kalitapar, we saw that it lay below the sand-dike on a piece of land encircled by trees and surrounded by water on three sides. The few pools inside the village, we were told, 'are the remains of the summer floods.' We were also told that the full name of the village is Kalitapar Mishing Gaon (*gaon* is Assamese for 'village').

All houses are built on a raised platform on piles. Rows of longhouses stood at some distance from each other along three parallel village streets, most with their protruding roof toward the street (D. 034 and P. 059). The space under the extending roof, which had two sections, was a transition that connects street and house. It was also the entrance and an outside room. The first section on the ground was for weaving and pounding rice. The raised platform and open veranda began at the second section.

An old man lived in one of the houses. He sat on his high veranda under the front roof and came down the staircase to meet us. Dr Nath respected this man highly and said, 'I will be grateful to him all my life. He gave the money that allowed me to go to school.'

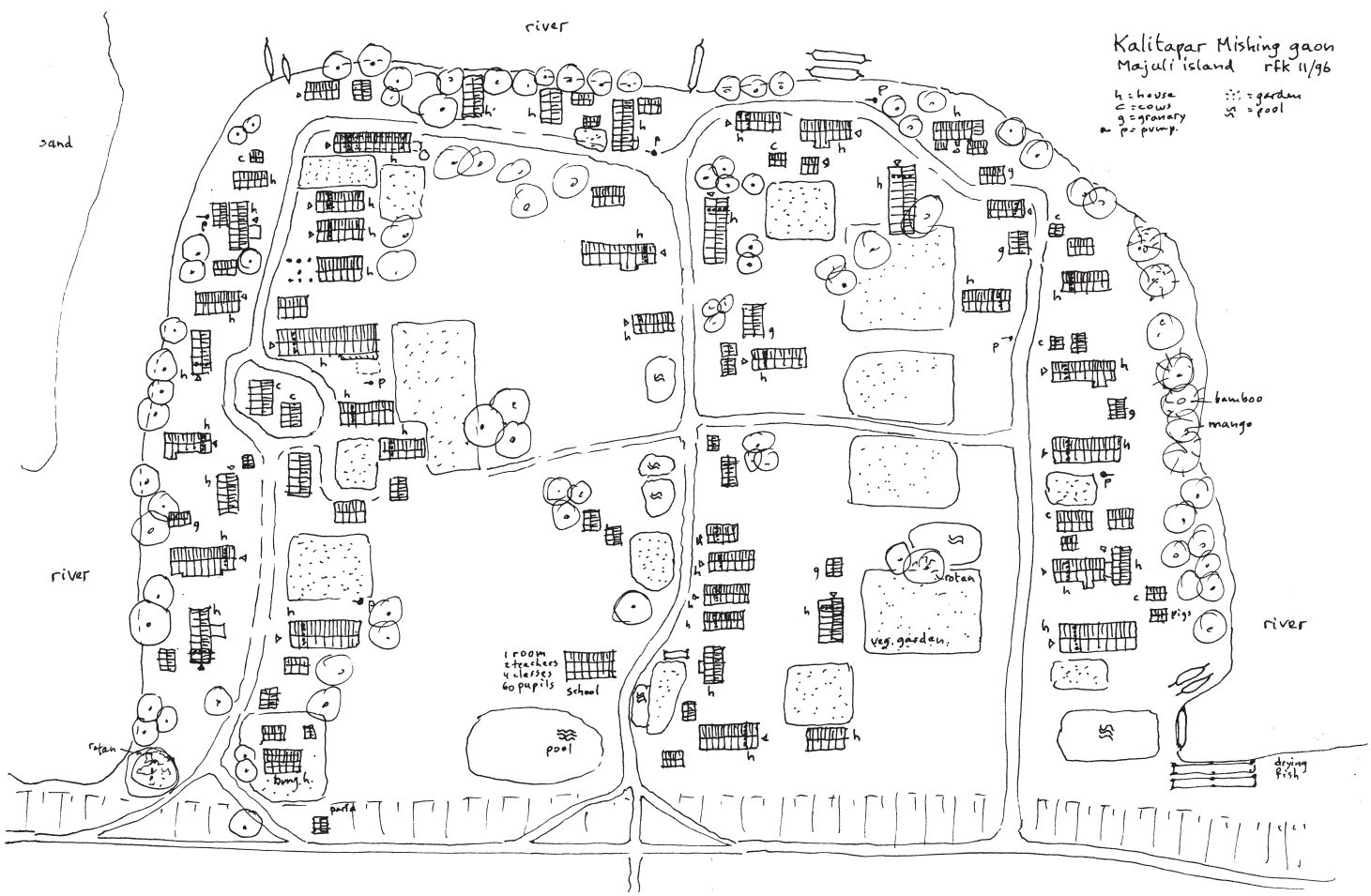
In front of the veranda, in the space where the roof was supported by free-standing columns, we saw a handloom, long pestles and an enormous wooden mortar with two holes, looking like a trough or gigantic anvil. When turned upside down, the mortar was used for sitting.

The staircase to the veranda was a tree-trunk with cut-out steps. I told them of having seen such staircases in West Africa with a forked end at the top that you can lean against the wall. At my gestures everybody nodded, confirming that they did this as well.

We left our shoes at the veranda and entered the house. The oblong room was divided into two spaces, each with a fireplace, by a half-partition wall. In the house lived a large family of two households: the grandparents and the parents with children.

After saying goodbye to the family we walked on through the village. Underneath one house lay a wonderful canoe with an upturned prow and back. It looked as if it had been made out of one piece of wood, but looking closer I saw it had several boards,

D. 033: Mishing village, Kalitapar, Majuli Island – view.



D. 034: Kalitapar Majuli Island – village plan.

P. 058: Mishing village Kalitapar, Majuli Island, 1996.

P. 059: Mishing village Kalitapar, Majuli Island, 1996.

ingeniously and nearly invisibly joined by iron nails, with textile and tar as fill.

Returning to Kalitapar, the villagers looked once more surprised, seeing white people. To get a better impression of the village, I started to make a village ground-plan (D. 034) and to do that I walked on all the paths, between all houses, along gardens and along the water.

During the past decades, the flood situation had slowly deteriorated. The village was surrounded by the river (on three sides) and a connection road led out over a ten-year-old man-made dike. It was supposed to protect the island during floods but was broken at many places. The village mainly consisted of three parallel roads, running from the river dyke to the by-pass road, and a path that cut across these roads.

Most houses were built on a platform on piles at a height of 1.3 to 1.6 metres above ground level. 'The houses are often inhabited by several families,' we heard. 'The largest contains five families, each with its own cooking fire.' The overhanging roof offered a shady place for pounding rice, weaving, sitting and receiving guests.

The village plan was nearly finished and I was busy, when a man cried something to me from his veranda. It sounded unfriendly, but there was nobody to translate. I thought he wanted to know, of course, why I was making drawings and notes. I, too, would like to know why someone was making drawings in front of my house. I showed him my sketchbook with drawings of villages and houses of other tribes, and he became happier.

Estimating distances, I got the village in fairly good proportions on paper. It wasn't easy, but in general it seemed to work (D. 034). Only the little boats in the water were not to scale.

Making a drawing of a short row of houses (D. 033 and P. 058), I stood near the one-room government school, the only brick or concrete building in the village. The schoolmaster said, 'I teach two groups, but there is only one classroom.' When I asked if that's not difficult, he agreed, saying, 'But there's no money for a second classroom.' Pointing at some flat ground in the shadow of a nearby tree, I suggested that in good weather one group could be taught outside. He didn't see this as a solution.

After lunch in the old man's house which we had first visited, I carried on with my drawings, starting with a house with three handlooms outside (D. 035, P. 061, P. 062 and P. 063). We asked the people living there if I might have a look inside, and we were welcomed. We climbed the tree-trunk stairs under the protruding front roof and sat together on the veranda overlooking the public space. 'Two families live in this house, 19 persons in all,' they said. 'This is our outside place for sitting and receiving guests; beneath under the roof we have our handlooms.' They also used that space on ground level for pounding rice (P. 060 and P. 062).

From the veranda we entered the interior. At the left side of the passage both families had their own open compartment for cooking and sleeping, more or less separated by walls. At the right side of the passage, and running the full length, was a built-out corridor for washing and storing water containers.

The house had been built completely out of bamboo: the construction, the walls and the floor. All the joints were made with vegetable fibres, and the roof was covered with jungle grass. 'Because termites attack the bamboo columns, we have to replace them every five to ten years,' they explained. Looking up into the roof, we saw a ridge supported by a beautifully carved post (P. 061).

Fixed to the columns or resting on separated piles, the floor beams supported a grid of bamboos with an upper layer of split bamboo. 'The whole floor should consist of at least five layers,' we heard. Walking to the back, we felt the slightly springy floor. At the end, a small second veranda with staircase opened to the vegetable garden and chicken-coop.

Some house-owners, if they can afford it, used locally made slender concrete columns, with a wider lower part to support the floor beams. Not all the columns were concrete, only those at the four corners or all side columns. We were told one concrete column costs 300 to 400 rupees, whereas a bamboo column costs only 20 rupees (and according to others you could make 3 to 5 columns out of one large bamboo), but they have to be renewed often.

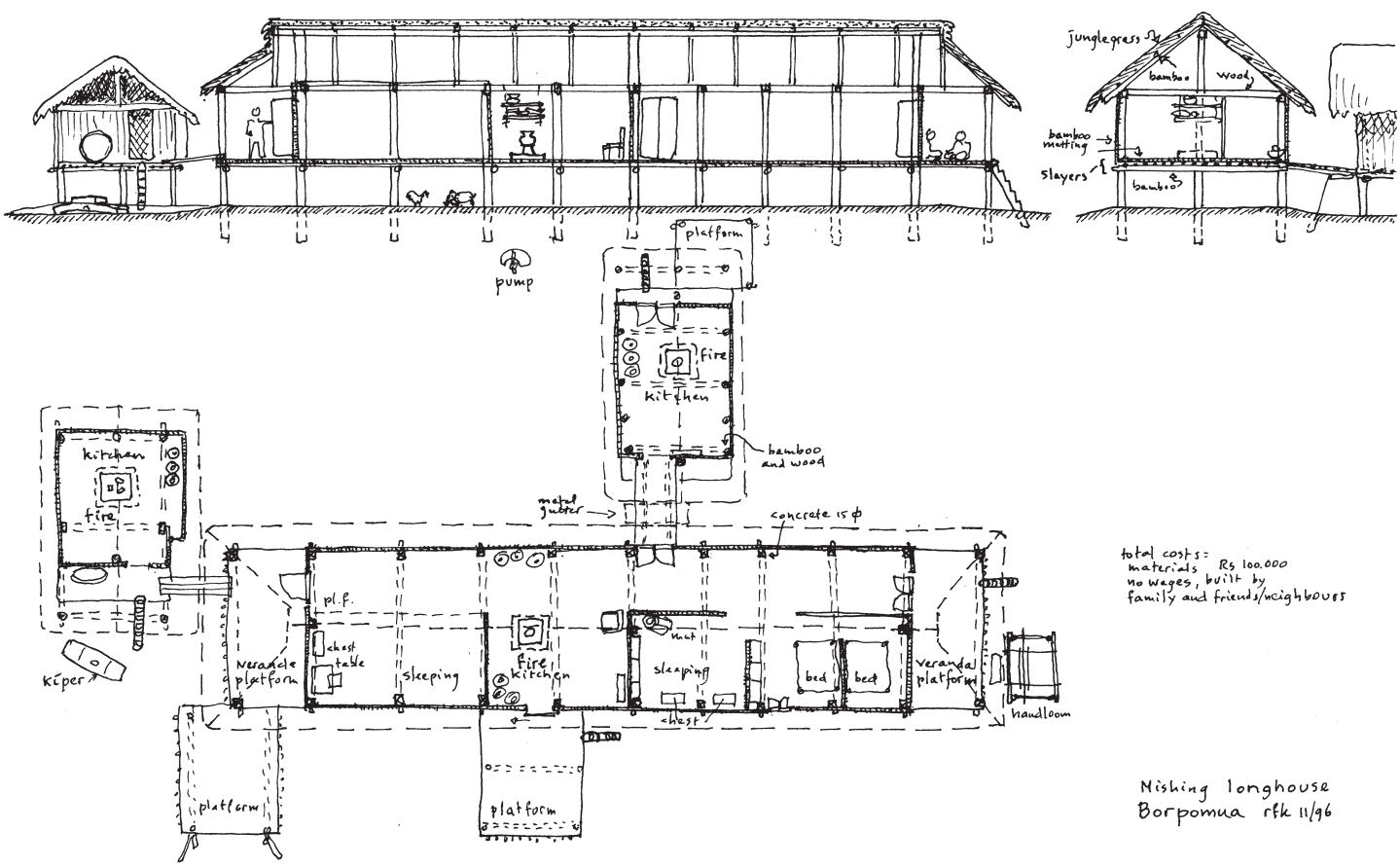
After a long walk we reached the village of Namoni Jakai Bowa where they had organized a dancing-feast (P. 065) in front of the headman's house. The singers' voices were audible above everything. When it was over, we were invited into the house for lunch around the fireplace. Sitting on the springy floor, we were served rice-beer in beautiful bronze dishes.

We visited another Mishing village, Borpomua Gaon, where the houses looked similar to those in Kalitapar but were larger and many have concrete columns. At one house we were welcomed by friends of our local guides and invited onto their front veranda (D. 036). A group of 23 people sitting on the

P. 060: rice pounding in front of Mishing longhouse, Mohorisukh, Majuli Island, 1996.

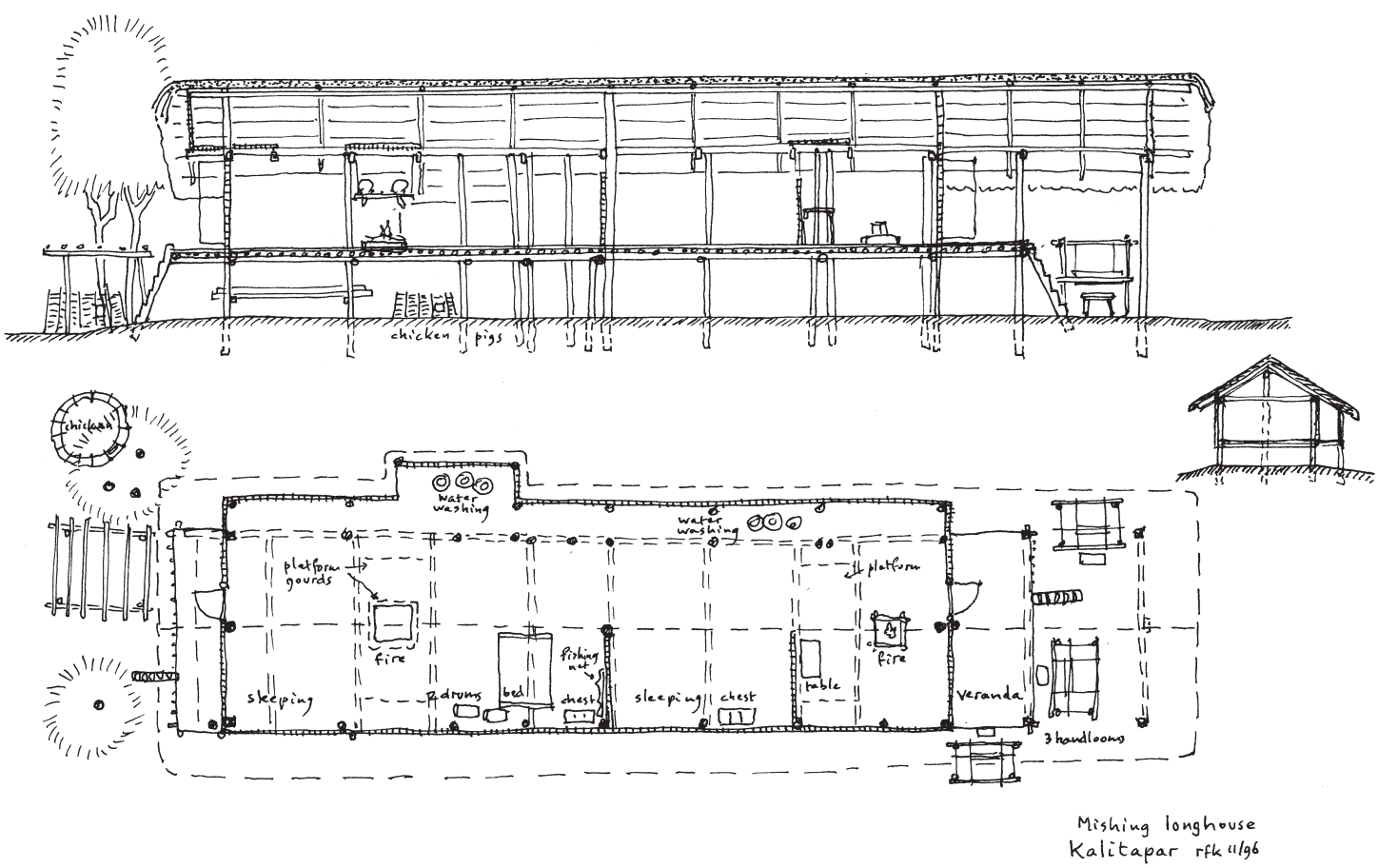
P. 061: carved crown-post, Mishing longhouse, Kalitapar, Majuli Island, 1996.

P. 062: rice pounding table and veranda tree-trunk stairs, Mishing longhouse, Kalitapar, Majuli Island, 1996.



D. 036: Mishing longhouse, Borpomua, Majuli Island – plan and sections.

P. 063: Mishing longhouse in D. 035, Kalitapar, Majuli Island, 1996.



D. 035: Mishing longhouse, Kalitapar, Majuli Island – plan and sections.

veranda proved the strength of the floor construction— it just bent a little and its strength was extraordinary.

'In this longhouse we live as four families, some 30 persons in total. The families are related to each other: grandparents, parents and children,' we heard.

The house contained three cooking fires. 'Cooking and eating are mostly done together,' they said. Washing up happened near the cooking place, water and food bits fell through the bamboo floor openings on the ground and were eaten right away by the chickens and pigs under the house. The family members washed themselves outside near the pump. For the toilet one went into the bushes around the village.

Having more verandas and terraces to sit on outside, every family had its own place in the longhouse. While we were sitting and talking with the young people at the front veranda, the old people were sitting on the back veranda, and we heard the grandfather singing now and then. Our hostess prepared a lunch, and we paid for the chicken and rice beer. Brown rice with spinach-curry and chicken were served with lots of rice beer, this time warm and also very tasty and refreshing.

The whole house and separated kitchens had been built in a few weeks, with friends, neighbours and relatives. According to the house-owner, the total cost of building was about 1 lakh or 100,000 rupees, all for materials, nothing was paid as wages. And that for such a large house, 4.5 to 5 metres wide and at least 30 metres long, plus two kitchens, each about 3 metres wide and 4 metres long.

The construction of the main house with concrete columns and wooden roof beams was a bit modernised, but the overall plan was traditional. One cooking-fire was still inside the house, but two kitchens had been built separately and connected by small bridges (D. 036). The shape of the roof was also a variant: the roof ran down on four sides and ended just above the veranda, without offering extra space on the ground level for weaving and rice pounding, as in Kalitapar (D. 035). The hipped endings at the front and back of the ridged roof on the house could also be seen as some kind of modernisation.

Next we visited the Mishing village of Mohorisukh, which had very large longhouses (P. 064). In front of one, a woman was pounding rice with a majestic looking wooden mortar (P. 060). The houses looked the same as in Kalitapar but were much longer. We visited two of them, both with those hipped roof endings. According to the local headman, these hipped and ridged roofs were common.

The first house, some 60 metres long and 5 metres wide, was inhabited by a total of 75 persons, 50 males and 25 females (D. 037, above). The house had the usual front and back veranda, three raised side terraces and a separate kitchen with two cooking-fires. Above the front veranda hung a bamboo pigeon-house about 1.5 metres long. The pigs and cows lived under the house, but there was a separate buffalo pen. 'Buffalos are not allowed to be together with cows because of the risk of being wounded by the cow horns,' we were told. At the other side of the road they had two granaries.

The second house (D. 037, below) was inhabited by 35 persons: 22 males and 13 females. It had a front and back veranda and a raised terrace at one side.

The house we saw in the Mishing village of Ukhal Chuk was also very large, about 60 metres long (D. 037, in the middle). It had four cooking fires, though one was temporarily missing. The ridged roof at the front side overhung three bays, one more than usual. Next to the normal veranda, a side extension of the roof overhung a second veranda at the side. Front and back veranda could be reached by the usual tree-trunk with cut-out steps.

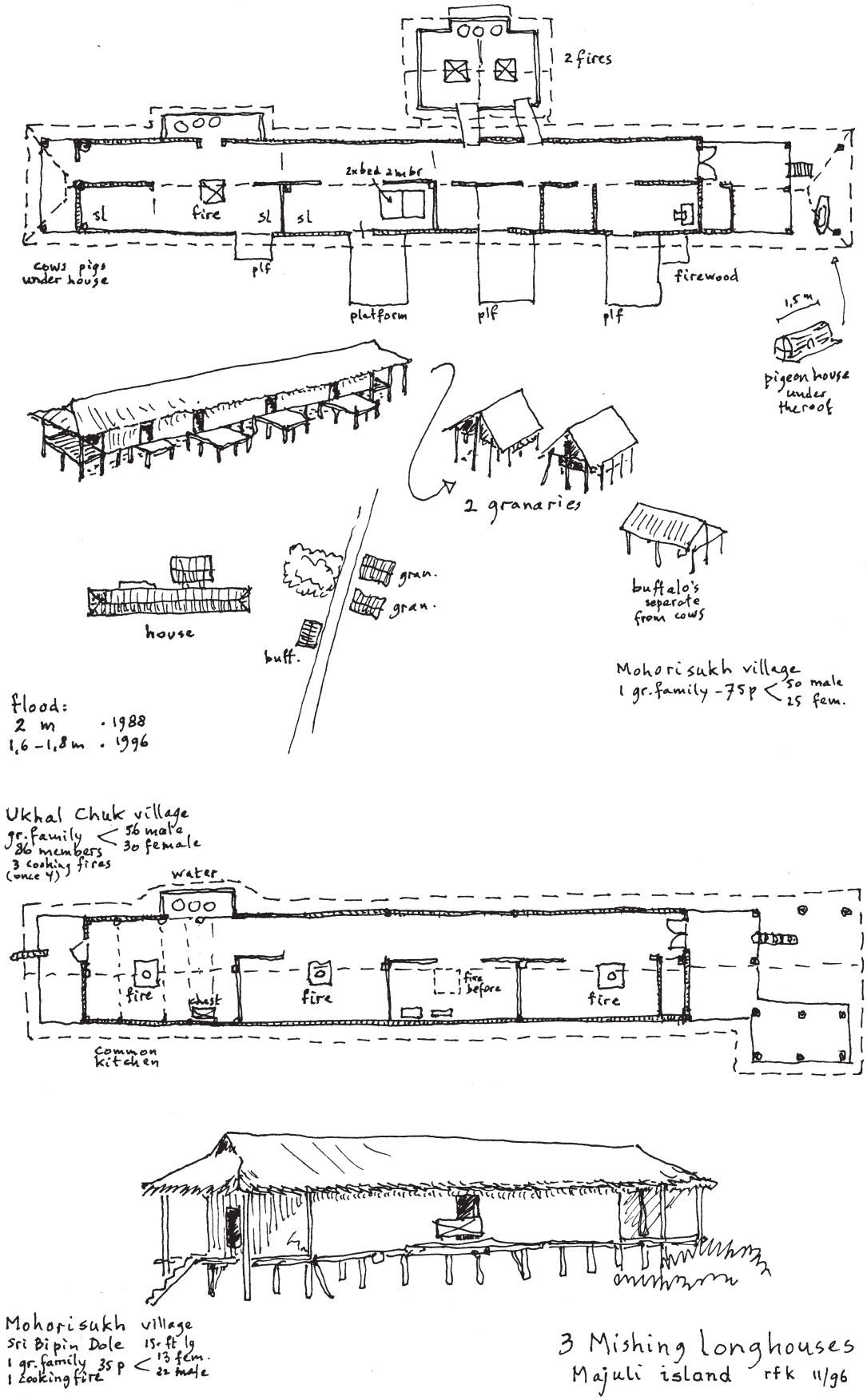
My question 'How many people are living in the house?' was not answered right away because the concepts of living, sleeping and eating were understood differently. In the end, we learned that the house was used by a grand-family of 86 people for sleeping alone: 56 males and 30 females. Even more people ate here.

We passed another longhouse (P. 066) while walking with the people to the nearby river, where a few wooden boats and tree-trunk canoes lay in the sand.

The last Mishing village we visited was Thakeratel, which lay south of Majuli Island. We should have called it a Miri village because although Mishing and Miri are two names for the same people, those living along the Brahmaputra River in eastern Assam call themselves Miri, and those on Majuli Island used the name Mishing.

The village had a simple ground-plan of houses along a central road. Built on a platform, the houses in Thakeratel looked identical to those we had seen in Kalitapar. The differences were few: at the back side a second entry with staircase, and a wider built-out annex for water supply.

First we were invited in the house of the headman. 'The household consists of grandparents, daughter with husband and grandchildren, seven persons in all. But together with the people who sometimes sleep here, the household consists of thirty persons,' he told us.

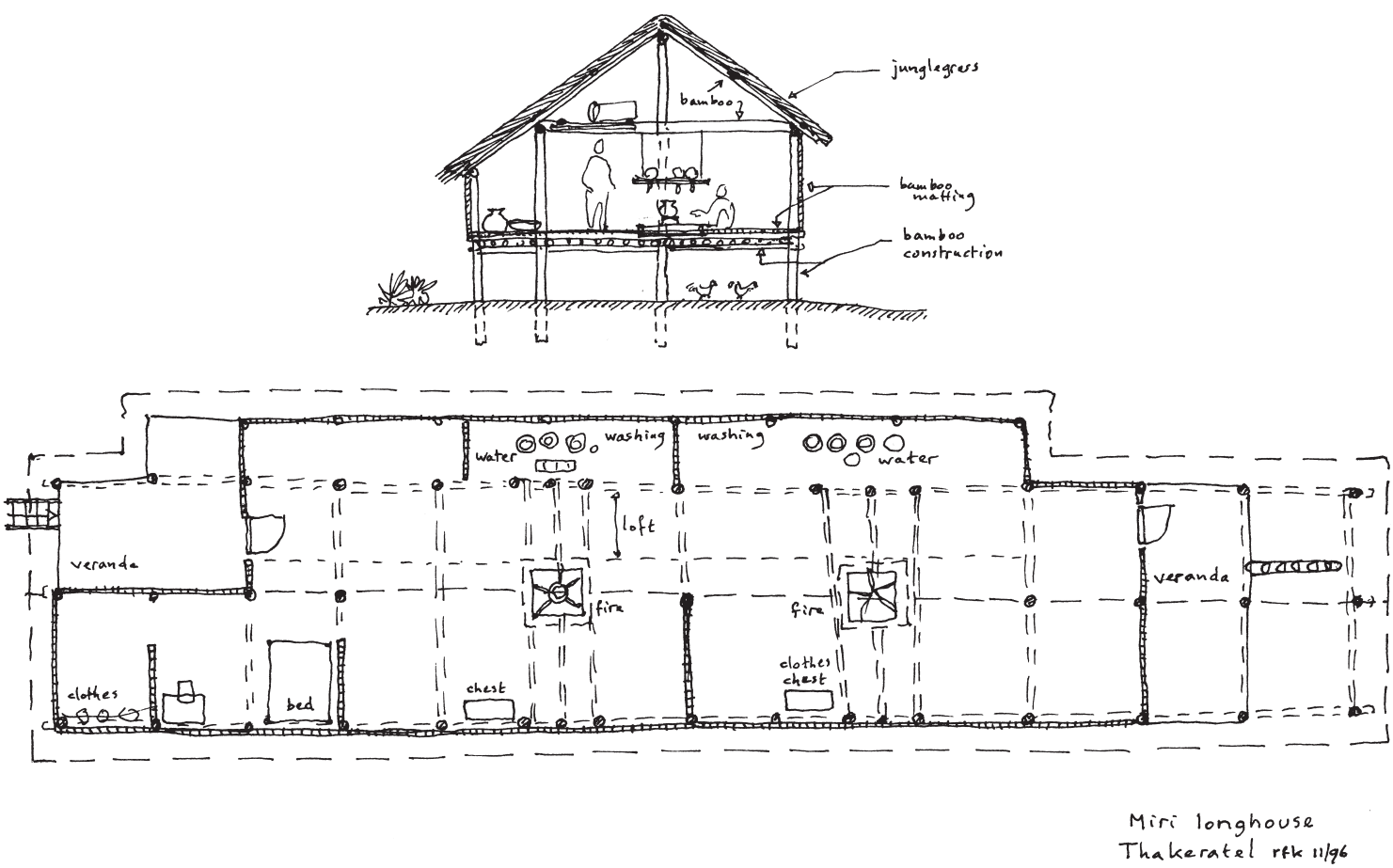


D. 037: Mishing longhouses, Majuli Island: Mohorisukh, for 75 people – plan and view; Ukhal Chuk, for 86 people – plan; Mohorisukh, for 35 people – view.

P. 064: Mishing longhouses, Mohorisukh, Majuli Island, 1996.

P. 065: music and dance, Namoni Jakai Bowa, Majuli Island, 1996.

P. 066: Mishing longhouse, Ukhal Chuk, Majuli Island, 1996.



D. 038: Miri longhouse, Thakeratel, near Gaurisagar – plan and section.

The house had the original partition and thatched roof, but here the construction was somewhat modernized: concrete columns, rectangular sawn wooden beams, triangular roof construction without middle columns, a system which was really new in traditional houses.

The second house (D. 038) we visited was inhabited by two families, of brothers. It was divided in two parts by a low bamboo wall, and each family had its own fireplace. The house was traditional, with a bamboo construction and a jungle-grass roof cover.

Outside we saw a nice tree-trunk canoe, made out of one piece, except a cross piece to keep the boards apart. In both houses we were offered rice beer in a bronze dish. When we said goodbye, they said, 'You are the first foreigners to visit our village.'

C. ARUNACHAL PRADESH

MONPA

Overview

Monpa houses are rectangular in shape and usually divided into two unequal parts, with three or four storeys. Most houses also have a domestic ritual space, with Buddhist icons.

Houses typically have a basement for keeping animals, a living and sleeping room on the the first or ground floor with a ritual space on the second floor in the front part, and storage and drying on the second and third floor in the back part. Monpa houses have stone walls, and wooden floors, ridge and rafters. Often the ritual space on the upper storey has a wooden façade. Monpas cover the roof with stone slabs or wooden shingles held down by stones.

Commentary

From the pass above Bomdila, we had a wonderful view of a row of snow-capped Himalayas. Winding along deep ravines, we descended into the valley of the Dirang River. The slopes were covered with pine trees and villages were visible with small orange structures nearby. Through our binoculars we saw that the orange structures were racks of drying maize. Monpas use maize to brew beer as well as eat it. Some houses had a roof of woven flattened bamboo bent over the ridge. It seemed to be a modern development, and I doubted that such a roof, even with many layers, would be waterproof.

We kept following the right bank of the Dirang River, which at this point was not much more than a wide rocky bed with a winding wild stream. The slopes were overgrown with mixed forest.

The first stone houses indicated that we had entered the Monpa area. The house type was completely different to houses elsewhere in Arunachal Pradesh: they had more storeys and the walls were built of stone up to the roof.

Our first visit was to Dirang, actually to Dum Dirang (Old Dirang), a few kilometres from the new Dirang. Stone houses, and some with wooden extensions, were bunched close together and rose above us. We climbed a flight of steps to an entrance gate. In a wall-niche stood a stone Bodhisattva, and on a kind of balcony we saw a decayed second statue. Just before the gate were prayer-wheels in a niche and above them a threefold wooden lintel ornamented with block-patterns painted in many colours.

One of the villagers we met, Mr Sangrama, was so kind to show us his house, where he lived with his wife and three children. He said, 'The house is already 120 years old' (D. 042 and P. 082). The house was three storeys high, with thick stone walls of piled sandstone blocks and wooden floors of wide, heavy floor-planks. The inner dimensions were about 5 × 8 metres, without any partitions.

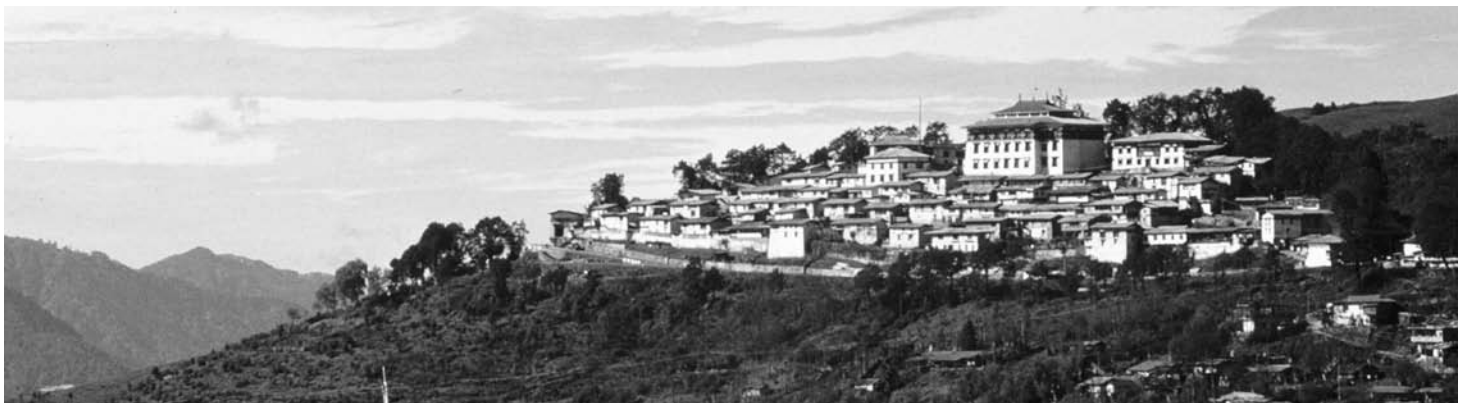
The middle storey served as a common living-room and was accessible via a terrace and outside staircase. The living-room had one fireplace with a hanging rack for drying firewood and smoking or drying meat, among other things. Up the tree-trunk stairs from the living-room, we reached the upper floor which was used for storage and drying millet and rice. The low basement, accessible only from outside, was for animals.

The upper floor construction had a typical structure of several layers: three spars in different directions above each other. The roof construction consisted of wooden and bamboo beams, rafters and purlins; all connections were made with cane. The roof was covered with woven and flattened bamboo, six to seven layers thick, bent over the ridge, as mentioned before. On the roof vegetables were dried in the sun and wind.

Many houses also had a small tower-like building with an opening at the front, looking like an oven. It was a place for burning juniper branches to fumigate and cleanse.

To reach the main Monpa area around Tawang we had to cross the Sela Pass, which is closed for three months every year. Before a dangerous curve a sign warned: 'You live only once.' Along the left bank of the river we went upwards, endlessly climbing toward the Sela. There we stopped and entered a simple shop to have some breakfast, but they had nothing. Sushil bought tea, a parcel with noodles, some chillies and onions. He cooked our breakfast on the kerosene-burner inside the shop.

We climbed higher and higher, where clouds hung round mountain tops. We could only see down, not up. Further upwards we drove in the mist, though



P. 067: Monpa monastery, Tawang, 1999.

now and then the sun came through. Between the low pine trees were high burned tree-trunks without branches—there must have been a terrible forest-fire. The sun was shining again and blue gentians bloomed along the road. The road surface was mainly sand and boulders, sometimes a little asphalt. Before 1962 (when China invaded India in this region) there was just a footpath, and it was along that path that the Dalai Lama fled to India.

Finally we reached the Sela Pass, which is 4,175 metres high. In the pass stands the Sela Mandir, a Buddhist temple, with fluttering flags. At the highest point, we passed a large gate crowned with two lions and a sign: 'Welcome to Tawang.' A bit further Sushil pointed out a trench where an Indian soldier held up the advancing Chinese Army for 36 hours, during the Indo-China war of 1962.

Then a long descent started. On the slopes young pine trees grew between the burned trunks of larger, old trees. Among the rocks along the stream we saw yaks, long-haired and thick-set with fat heads and crooked horns.

After crossing the bridge over the Tawang River, we reached Tawang with its famous 17th century monastery-temple, or *gompa*. It was constructed and is now maintained with the help of the surrounding villages. The monastery houses 300 (in the past 500) lamas and contains a large library and school.

Tawang monastery looked like a village (P. 067). The prayer-hall (*dukhang*) towered above the monks' houses, with a school on the right, a central kitchen on the left, and a library just behind the prayer-hall. The white-washed buildings, regularly interrupted by the black window holes, were covered with yellow metal roofs. Near the entrance road, in front of a prayer room we met a nice Monpa woman in traditional dress and a felt cap with tassels (P. 068).

Through three gates and along rows of prayer-wheels we followed the path upwards to the temple, which was fort-like and imposing (P. 069, P. 070 and P. 071).

Several buildings of the monastery complex had been renovated, some recently. So the earlier wooden construction inside the heavy stone prayer-hall walls had been replaced by concrete; some old ornaments had been replaced; handrails were made of steel and the floor was covered with marble. The original wooden shingle roof of the prayer hall, library and monks' houses had been replaced by yellow, painted corrugated iron sheets.

We entered the prayer hall, though our shoes had to remain outside, at the foot of the marble entrance steps. Inside, we looked straight up to the Buddha, nearly eight metres high. Lamas sitting on both sides of the central passageway made music, while other lamas were sitting higher up and nearer to the Buddha.

Standing on the highest balcony at the front and looking out over the square, we saw a big drum and many long trumpets nearby on the floor. Back on the square in front of the prayer-hall a group of boys and girls sauntered round us. They were on excursion from Guwahati and, one after the other, asked to be photographed with us.

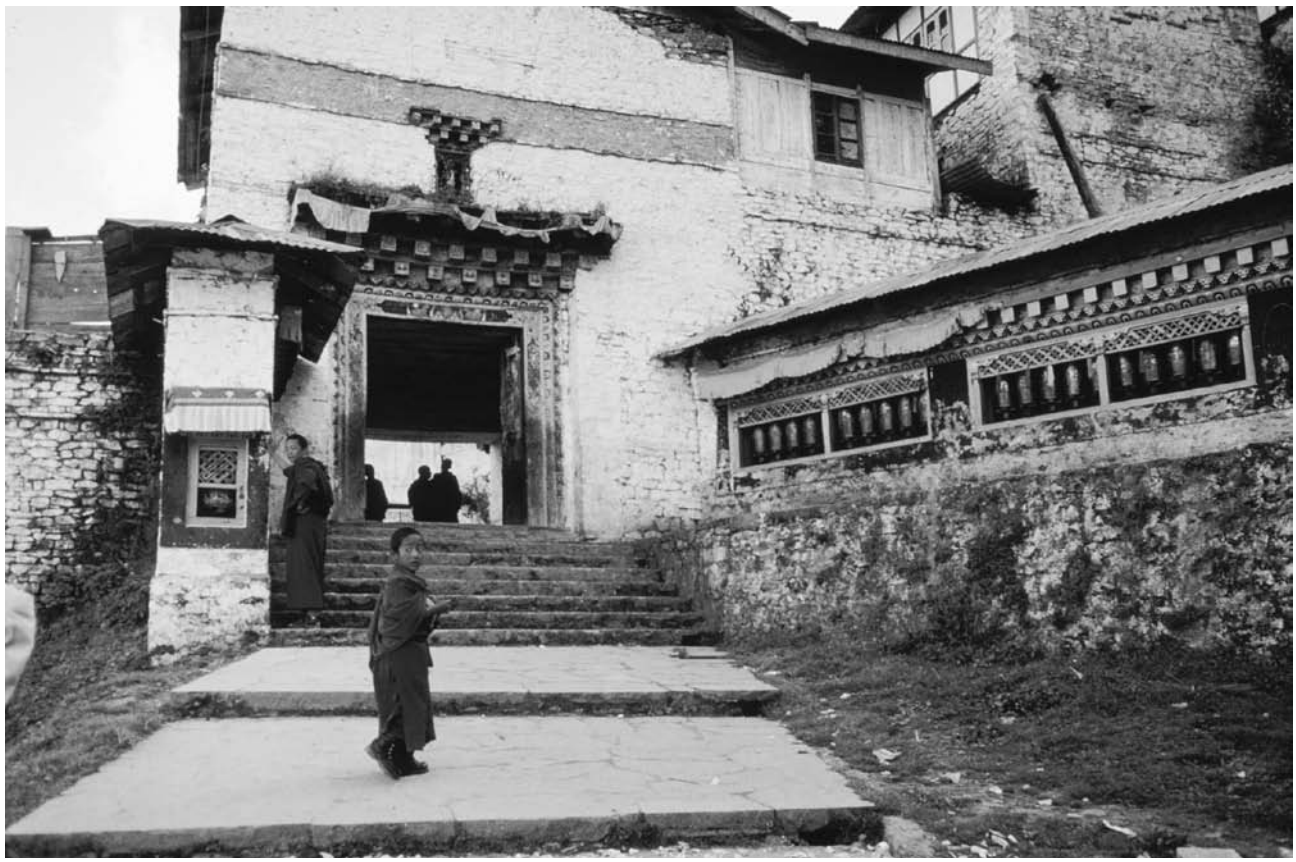
We then visited the village of Bomdir, located in a beautiful spot on the other side of the river from Tawang. Entering the village along a footpath, we passed a small building with prayer-wheels (P. 073) and a bit lower a kind of kiln (P. 074). We were accompanied by Mr Pota, who knew the village since his sister lived here. From the footpath, we saw that some roofs were covered with metal or woven bamboo, but most had wooden shingles or stone slates (P. 072).

In the village, women were doing the washing-up in a jet of water coming from a wide tube that extended from a stone building. It was the local temple-monastery, or *gompa*, recognizable by the wooden

P. 068: Monpa woman and lama, Tawang, 1999.

P. 069: temple side-façade, Monpa monastery, Tawang, 1999.

P. 070: library, Monpa monastery, Tawang, 1999.



P. 071: entrance gate, Monpa monastery, Tawang, 1999.

P. 072: Monpa village, Bomdir, 1999.

P. 073: prayer wheel building, Monpa village, Bomdir, 1999.

P. 074: a kiln for burning juniper branches to fumigate and cleanse, Monpa village, Bomdir, 1999.

P. 075: Monpa house, Bomdir, 1999.

lintels decorated with block-patterns above the windows of the first floor. A paddle wheel turned in the stream under the building and, when there is enough water, it turns the two large prayer wheels in the room above. But at this moment it was not working.

Walking through the small streets of the village to look for the most characteristic house (P. 075), we reached Mr Pota's sister's. 'It's a one family house,' he told us. 'She lives here with her husband and three children.' The house looked traditional, the only modern element was the metal roof on the small side annex (D. 039, D. 040 and P. 076)

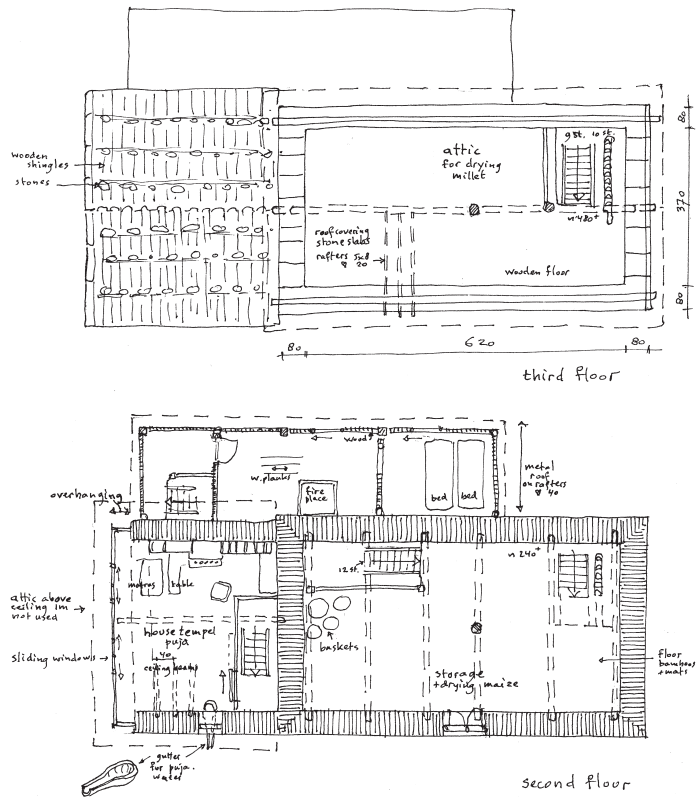
Luckily Mr Pota's sister was at home and invited us inside. She said, 'My husband serves in the Assam Rifles in Guwahati, so he's not at home.'

With four floors, the house was big, and at first sight the plan looked complicated. 'The rectangular original house should be some 240 years old and has always been kept in the family,' she said. 'In the course of time it has been extended with a front house and a side annex.' The house stood across the slope and had its access through the adjacent courtyard on the upside. The children were playing with their friends, watching what I was doing. The two smallest had fun sitting in a large pan filled with water. Around the courtyard were an open shed with fireplace to brew rice-beer or millet-beer and another one for firewood, while in the wall near the passage a niche burned black on top.

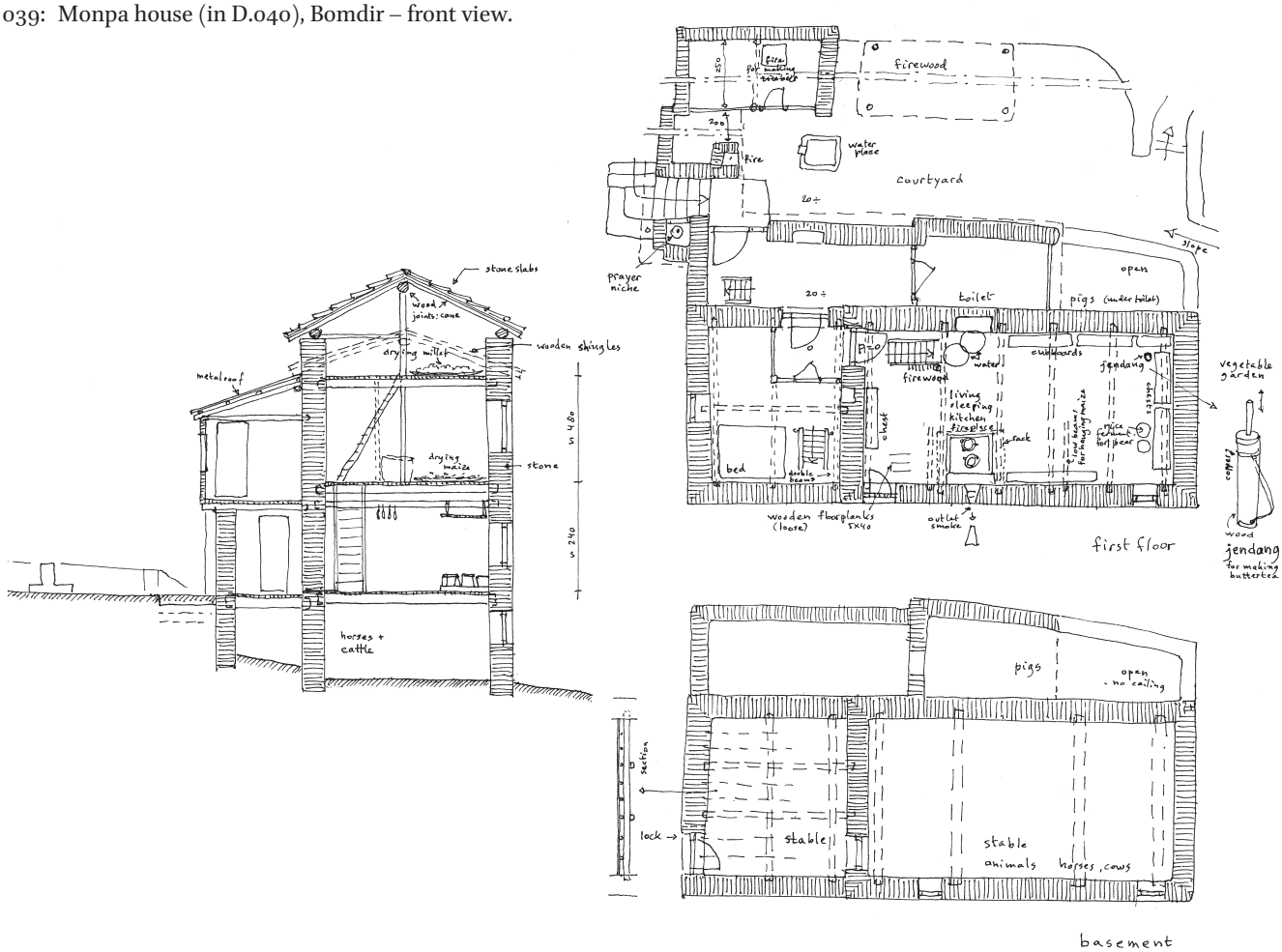
The main floor of the house lay on the same level as the courtyard. Inside was the living room with kitchen, fireplace and sleeping place, and in front a separate bedroom. In the side annex at the back was a toilet space, with openings in the floor giving on to the pigsty underneath. The basement served as a place for horses and cattle, and was only accessible from outside.

On the main floor were three staircases. From the living room, one could climb to the third and fourth floors, which were used for storing maize and millet; the stalks lay spread out on the floor. From the bedroom in the front house a staircase went up to the ritual space with an altar and sitting space around a low table. This room had a wooden extension with sliding shutters. From the entry annex, the third staircase went up to an extra living room with fireplace and small bedroom.

The house was constructed with stone walls, about 80 centimetres or more in width. Wooden beams supported the upper floors, and the basement had a



D. 039: Monpa house (in D.040), Bomdir – front view.



D. 040: Monpa house, Bomdir – plan and section.

Monpa house
owner: Gomlhamy
Bomdir rfk 10/99

P. 076: Monpa house in D. 040, Bomdir, 1999.

clay floor. The roof of the main house was covered with slates and the roof of the front house with wooden slates held down by stones, while the side annex had a metal roof.

I was offered an enamel cup with butter tea, again and again, three times. Edith already had a cup in her hands. Our hostess told us how butter tea is made: with 'ghee' (clarified yak-butter), tea and salt. She pointed to the wooden cylinder, with copper rings and closed at the bottom and top, standing in the corner. 'The milk is churned by moving the stick up and down, and later tea and salt are added,' she said.

The first taste was strange, and you had to get accustomed. But thinking of it as a strong vegetable brew, it was certainly drinkable. Salty, rancid, fatty, in fact, it resembled the taste of French cheese, like Roquefort.

Descending a steep road into the Tawang River valley, and going further downstream in the direction of Bhutan, we entered the Monpa village of Seru, situated on a slope (P. 078).

It resembled Bomdir. High stone houses, near to each other, were connected by footpaths (P. 077, P. 079 and P. 080). The houses were of the same type, rectangular and consisting of two parts of unequal length. Also here the second floor of the lower and shorter part had a nicely shaped wooden façade belonging to the ritual room.

At one of the most traditional-looking houses, we asked the woman who lived there if I might make some drawings. She agreed and welcomed us (D. 041 and P. 081). 'As far as I know,' she said, 'the house is at least 300 years old.'

Showing us around, she added, 'I live here with my husband and six children. My husband is not at home, since he works for the army.' The shape and partition of the main house over all four storeys were largely identical to those of the house in Bomdir.

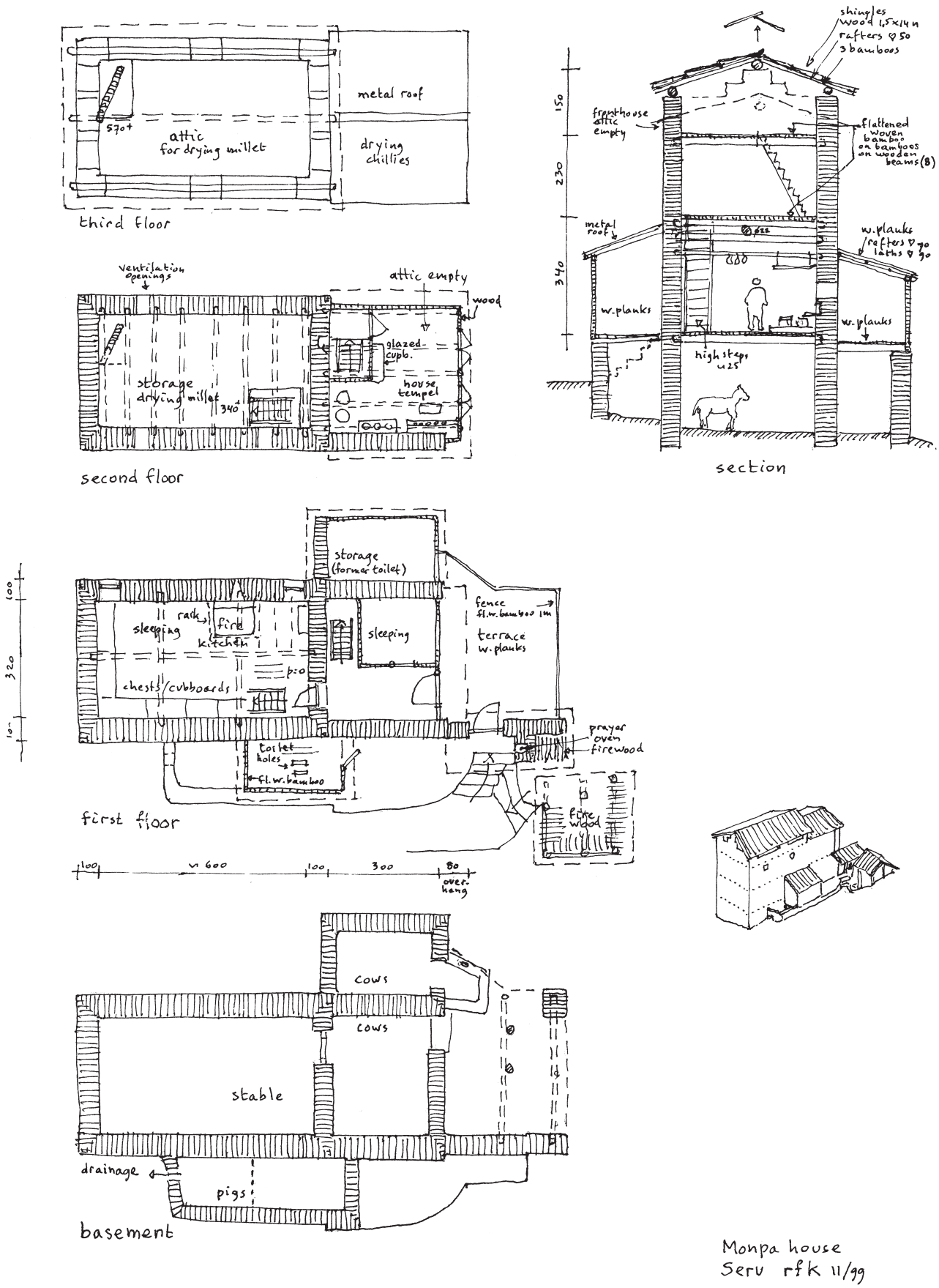
This house, however, was a bit smaller, the walls thicker and the small annexes different. Also, instead of a side courtyard, this house had a front terrace, and for that reason the front door was at this side. The roof of the higher part of the house was covered with wooden shingles held down by stones, while the lower part had a new roof cover of corrugated iron, where a large amount of chillies lay drying.

P. 077: Monpa house, Seru, 1999.

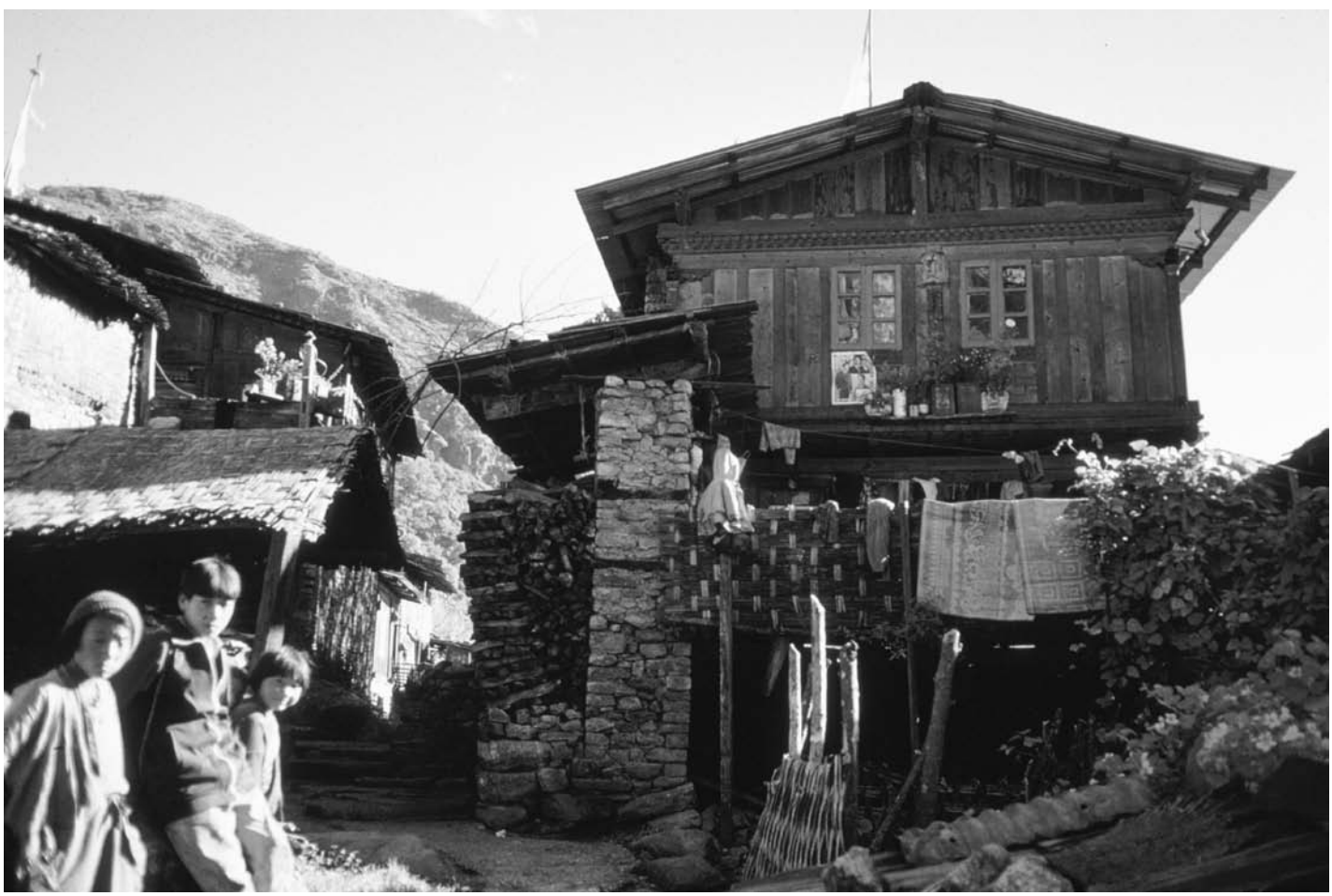
P. 078: landscape, near Seru, 1999.

P. 079: Monpa house, Seru, 1999.

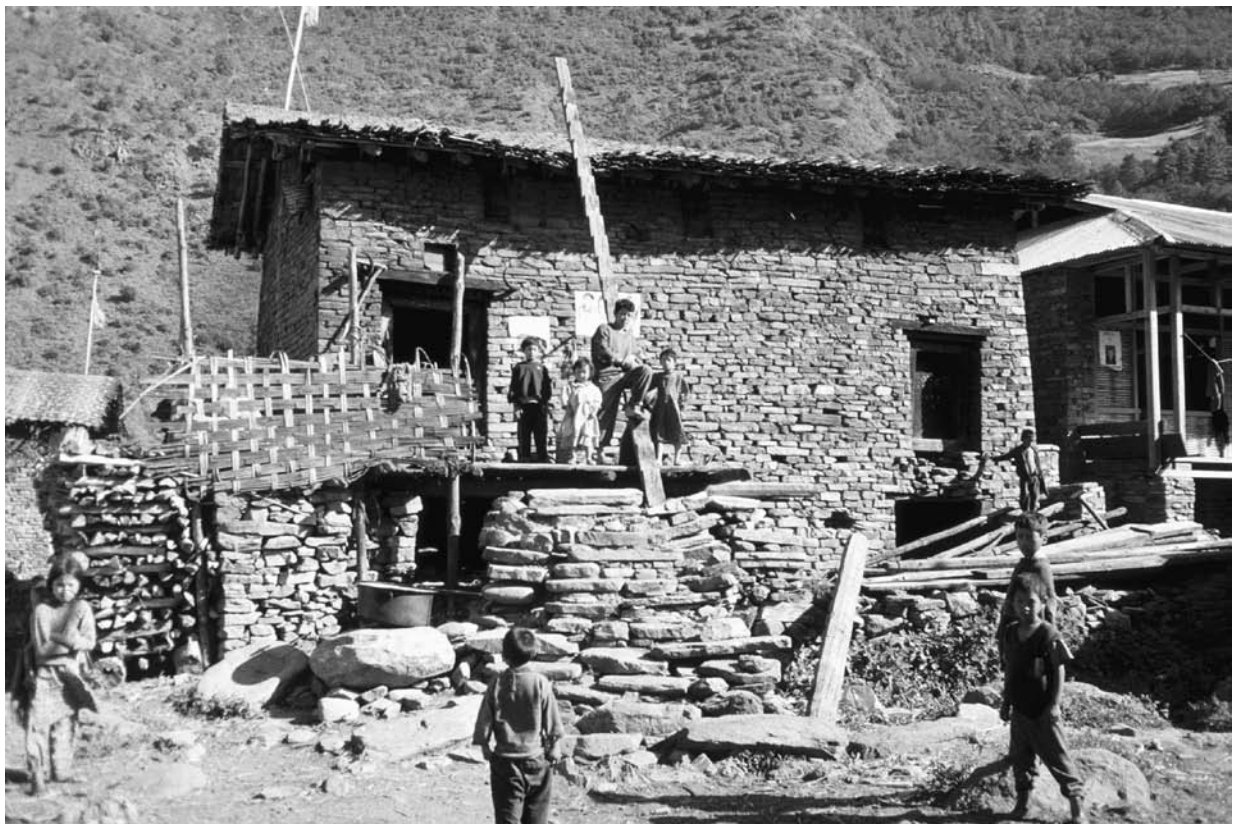
P. 080: Monpa village, Seru, 1999.



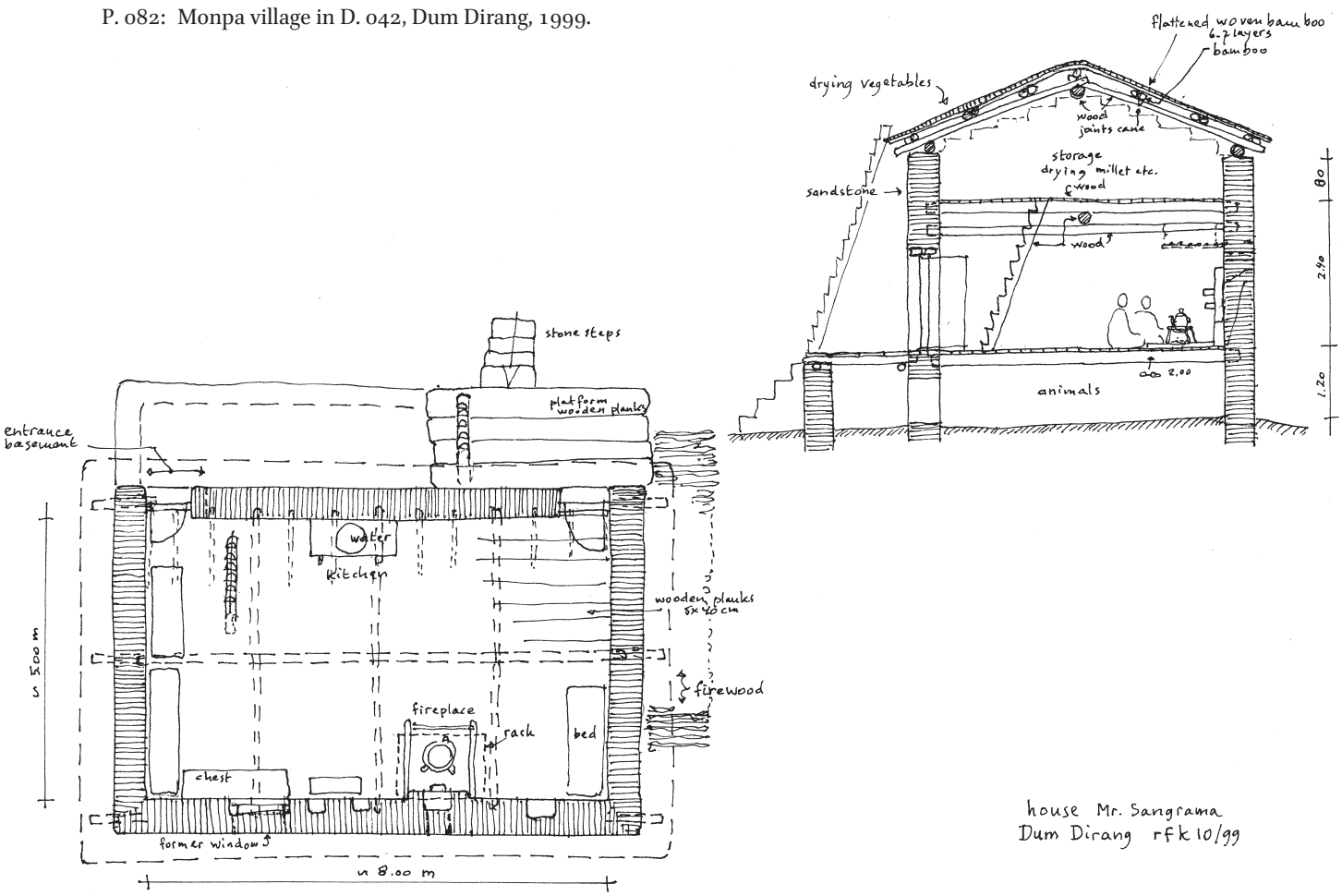
D. 041: Monpa house, Seru – plan, section and view.



P. 081: Monpa house in D. 041, Seru, 1999.



P. 082: Monpa village in D. 042, Dum Dirang, 1999.



D. 042: Monpa house, Dum Dirang – plan and section

SHERDUKPEN

Overview

Sherdukpen houses are usually rectangular, built on three levels with a ridged-roof, and often with a Tibetan Buddhist prayer flag-pole on top. They have a low basement which acts as a stable, a ground floor with outside terrace, living room (usually two fireplaces) and a rear room for rituals and storage, and an upper floor for drying and storing grains, etc. The courtyard is used for pounding grain, the toilet is in the fields and there is no granary.

Floors are made of wood. Walls are made of stone from the ground up to half a metre above the floor of the living room and then wood above that, and bamboo matting walls on the second floor. The roof is covered with wooden shingles and stone weights, although recently they have started to use layers of bamboo matting or metal.

Commentary

We visited Chillipam, a Sherdukpen village on a jutting mountain ridge with steep slopes. Meeting the village schoolteacher, a Sherdukpen named Mr Megeji, we explained our interest in traditional houses and he offered to be our guide.

'21 families live in Chillipam, and the other inhabitants come from Nepal,' he said. 'They grow here millet, maize (for brewing beer) and potatoes. Rice comes from Assam.' In the winter months most of the Sherdukpens move to Doimaru or Phuchil, near Assam. 'They have a second house there,' he told us, 'and in November or December they leave from here.'

On our way Mr Megeji continued, 'When a family has three sons, the first as well as the second have to build their own houses, while the third one gets his parents' house. The second son doesn't go into a monastery as with Monpas [a neighbouring population], that's not done here.'

He took us first to his sister's house (D. 045, P. 089 and P. 090). It was smaller than the most other houses and had only one room on the middle level. She lived here with her son, since her husband had died and her daughters were married and out of the house. 'I think the house is 15 years old,' she said. 'Building the house took about one month, with everyone in the village helping.'

It was striking that most of the wooden planks were sawn, though some were cut with an axe. Another example of modernization was the use of iron, such as nails to fasten some planks and wire to fasten the wooden shingles, which was not done in the traditional house. Traditionally, stones had been laid on the shingles to prevent them blowing off.

The house had the typical three levels: living-room in the middle, stable in the basement, storage in the loft. The latter served also as space for drying corn and other grains. Up a few steps and along a raised terrace we entered the house. The living room stood about one metre above the ground, whereas before it had been higher and so the stable had been higher, too.

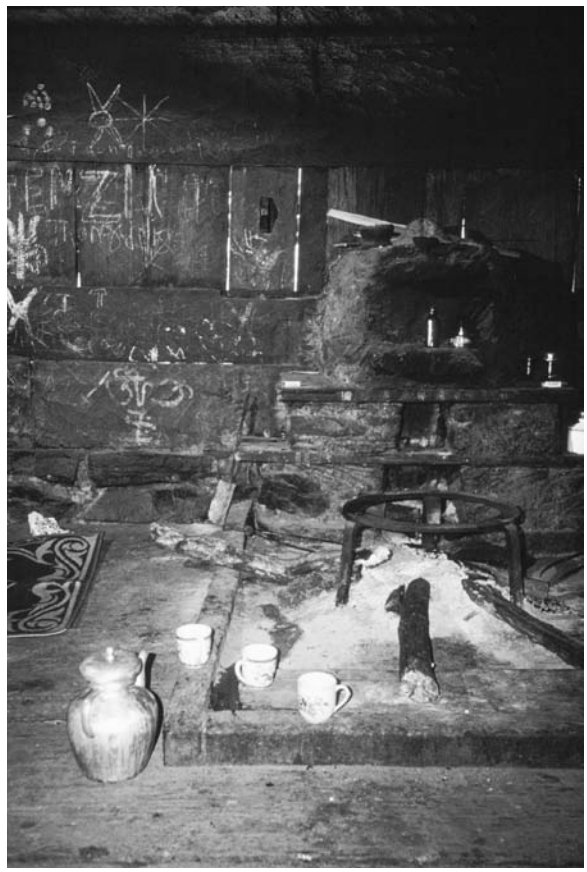
The living-room had only one fireplace and, in contrast to the traditional Sherdukpen house, this one didn't have a domestic ritual space and or separate rear room. Our driver, Sushil, later told me he saw an image of Christ here, which might explain the absence of a domestic ritual space. Mr Megeji told us that 'Sherdukpens live mostly with one family in their house, but joint-families with more fireplaces also exist, and then the house is made longer.'

A little further on, the older brother of the headman welcomed us into his house and even showed us his ornaments. He took out a woven-cane box which holds his and his wife's jewels. To make a good photo they spread them out on a valuable Monpa carpet. In the meantime two women had put on their traditional dress to be photographed (P. 087 and P. 088).

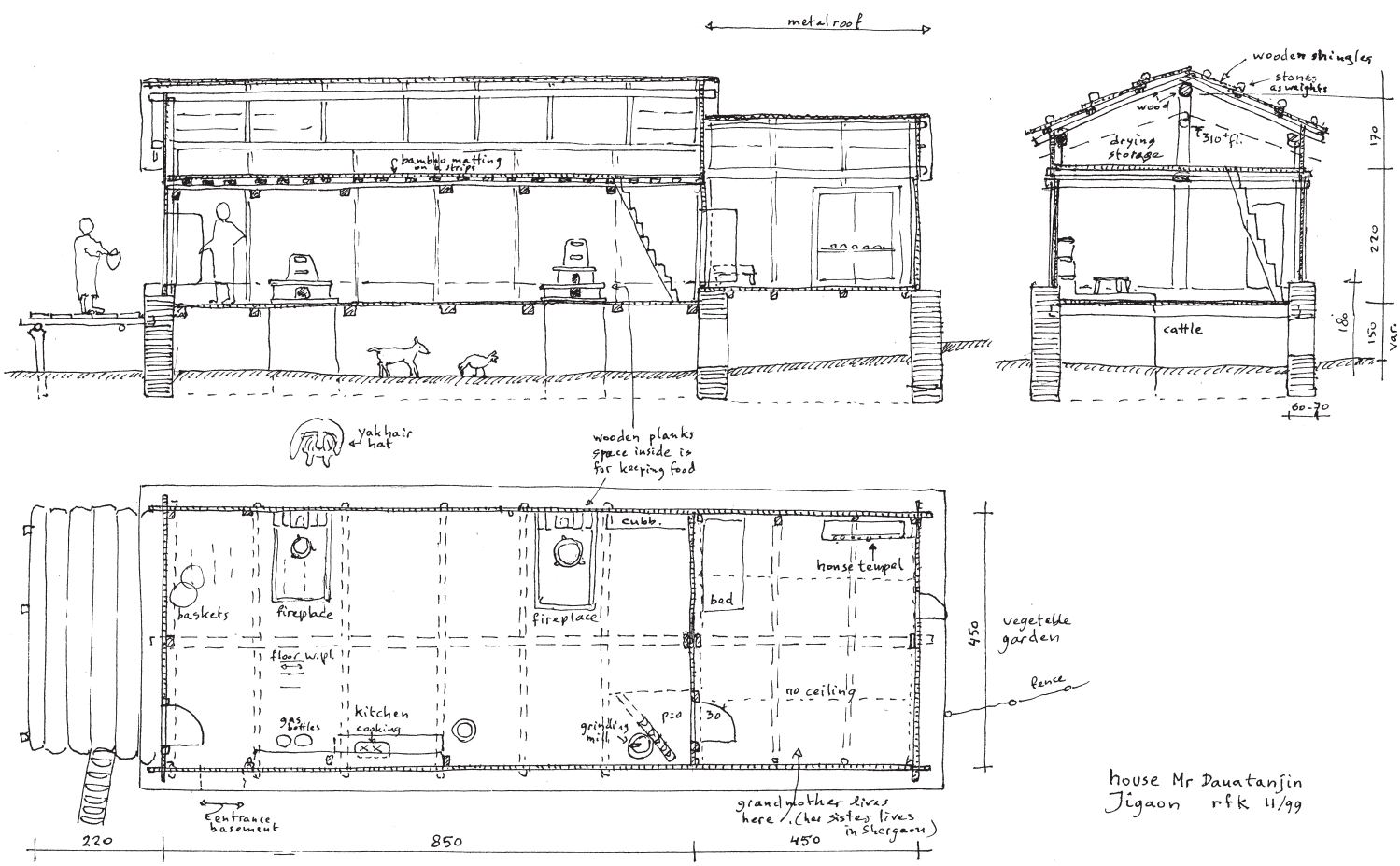
After this we had a look at the house and I started to make a drawing (D. 044, P. 085 and P. 086). This house was the traditional type with living room with one fireplace and a separate room for rituals. The ground-plan was the reverse of that in the first Sherdukpen house, and here no iron was used, only stone, wood and bamboo.

The walls up to half a metre above the living room floor were natural stone blocks. Above that, up to the loft floor, they were made of wooden planks, placed as follows: one wide, horizontal plank, then a row of

P. 083: Sherdukpen house in D. 043, Jigaon, 1999.

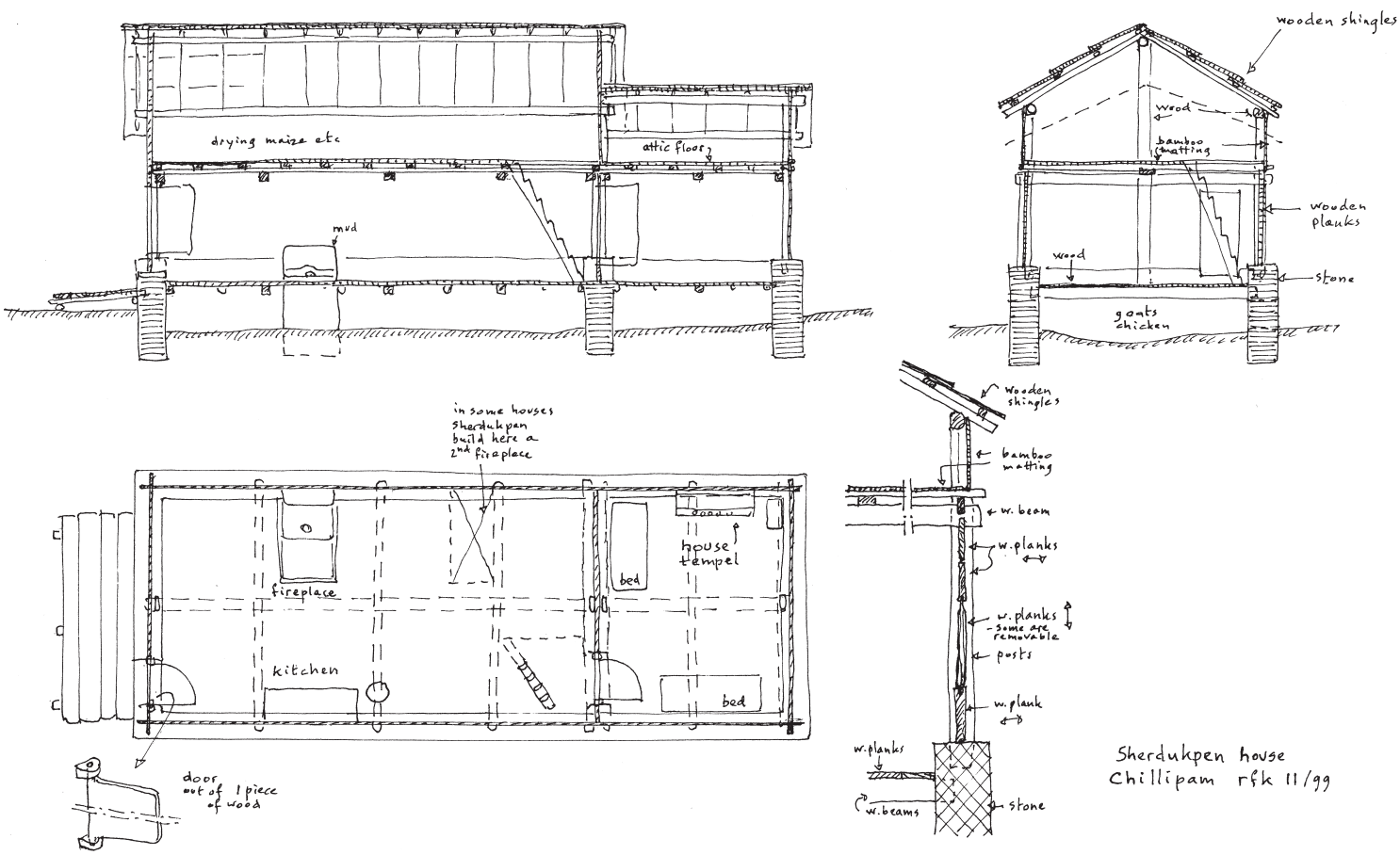


P. 084: interior, Sherdukpen house in D. 043, Jigaon, 1999.



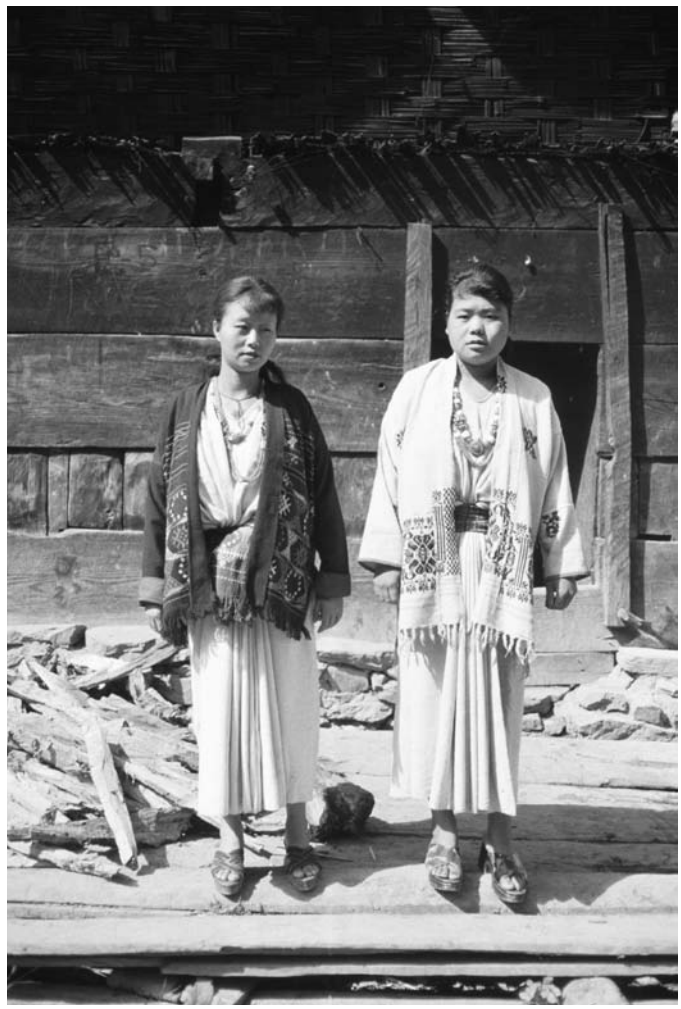
D. 043: Sherdukpen house, Jigaon – plan and sections.

P. 085: Sherdukpen house in D. 044, Chillipam, 1999.



D. 044: Sherdukpen house, Chillipam – plan, sections and detail.

P. 086: Sherdukpen woman and house entrance in D. 044, 1999.



P. 087: two Sherdukpen women in traditional dress, 1999.

P. 088: Sherdukpen ornaments on Monpa carpet, 1999.

short vertical planks and at the top two wide horizontal planks. All the planks were thick wood and fixed between posts inside and out. In the corners the planks extended beyond the walls and crossed each other (P. 085 and P. 089). The plank walls supported the loft joists.

From the loft floor upward, the wall was made of woven bamboo matting, which ventilates the corn drying in the loft. The stable floor was of tamped mud. The floor of the living room was made of thick wooden planks on wooden beams, and the loft-floor was made of bamboo matting on wooden beams. The roof was constructed with wooden rafters and purlins covered with wooden shingles.

Two special details stood out: the front door, including its pins, was made out of one piece of wood; and some of the vertical wall planks could be taken out to ventilate or make a window.

Leaving Chillipam, we followed the Daphla Khu valley, first high along the slope and then descending slowly until we arrived in the village of Jigaon. Immediately, from above, we could see that most of the houses were modernized, built with concrete and metal roofs. Of the few still existing traditional houses, one at the back looked the most original, so we decided to visit it (D. 043, P. 083 and P. 084)

Luckily somebody was at home, and we were cordially welcomed by a woman, whose husband arrived a bit later. Invited to come inside, we climbed up the tree-trunk staircase to the front terrace from where we crossed over a high doorstep and entered the living room.

The floor was 1.5 metres above the ground, which was the norm. In the living room were two fireplaces and we sat down around the first one. While starting to make my drawing, we were offered maize-beer and roasted maize. They told us that the house was inhabited by one family: grandmother, daughter with husband and two children. The man worked as a housekeeper at the local Inspection Bungalow.

The living room was for cooking, eating, sleeping and receiving guests. In the second room, at the rear, was the ritual space and place for grandmother's bed. A tree-trunk staircase led to the attic, used for storage and drying. The stable was in the basement.

Comparing this house with the second house in Chillipam, we noticed a few differences. This house was a bit longer; it had two fireplaces; stones were used on the roof to hold down wooden shingles; and the lower roof was covered with metal. But the rest—shape, construction and material—was similar.

The fireplaces, though, were peculiar. At the backside, they had a kind of small stair-like tower with planks in it, which looked a little like a monastery (P. 084). Asked if the planks didn't burn, they answered, 'The fire burns in front of and not inside the tower.' The space inside the 'tower' was used for storing coals and to warm a pan.

Then they told us, 'The ground on which the house is built is owned by the house-owner. The exact location of where to build is chosen by the house-owner, and the local priest is asked only afterwards for approval. Building the house is done with help of family, friends and neighbours and takes about one month. After finishing, a feast is given with beer, singing and dancing. Music instruments are not used.'

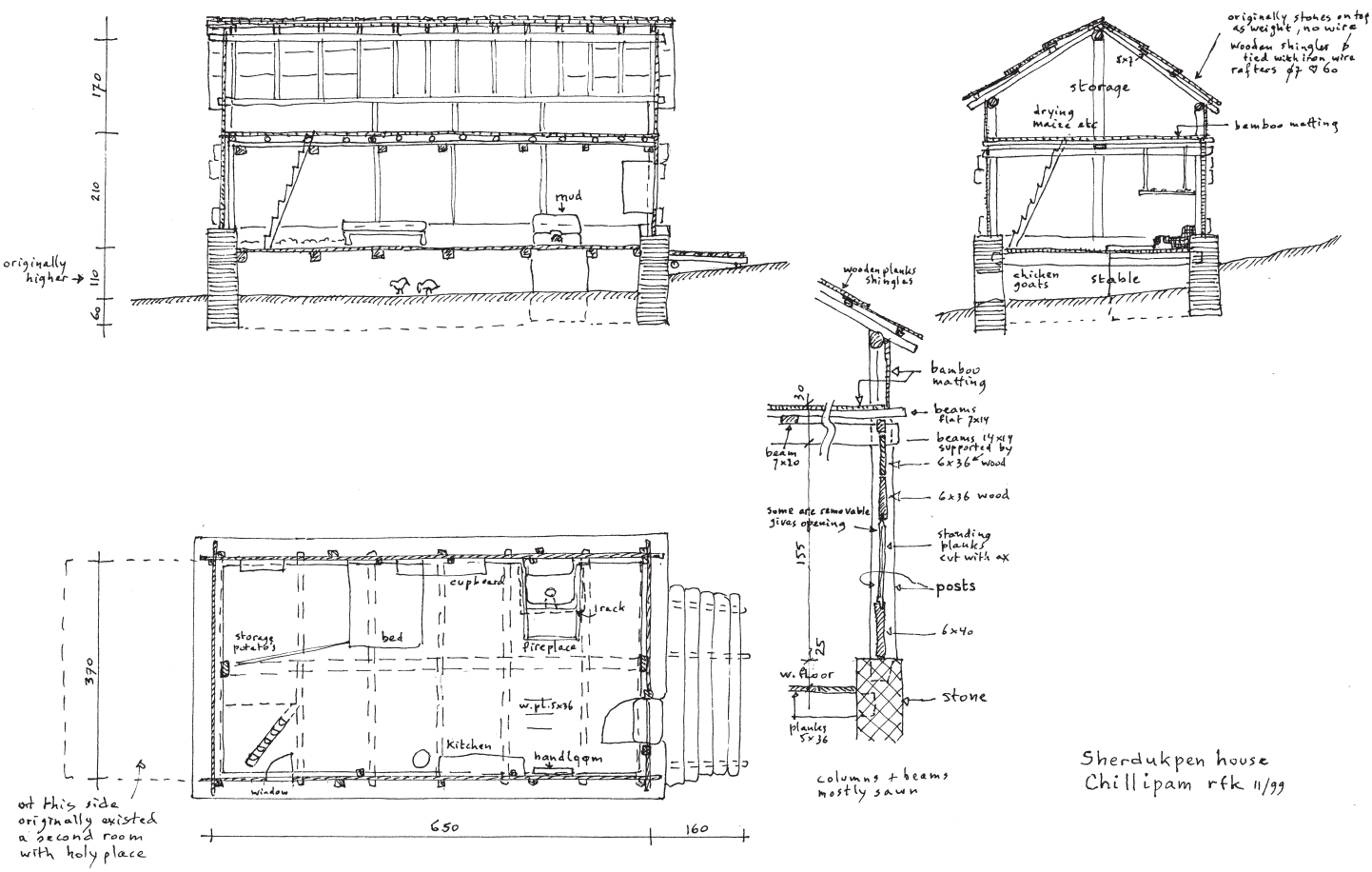
We left and wound some 900 metres back up the slope. We saw Jigaon lying behind and below us, and Chillipam in front of us. At the left side of the valley was Rupa, and high above on the opposite side was Bomdila.

In Rupa we saw a Sherdukpen temple-monastery or *gompa* (P. 091). The small rectangular Buddhist building had whitewashed stone walls and ornamented roof edges, friezes and window frames, while the roof was crowned with a tower in two receding parts. The roof cover was metal.

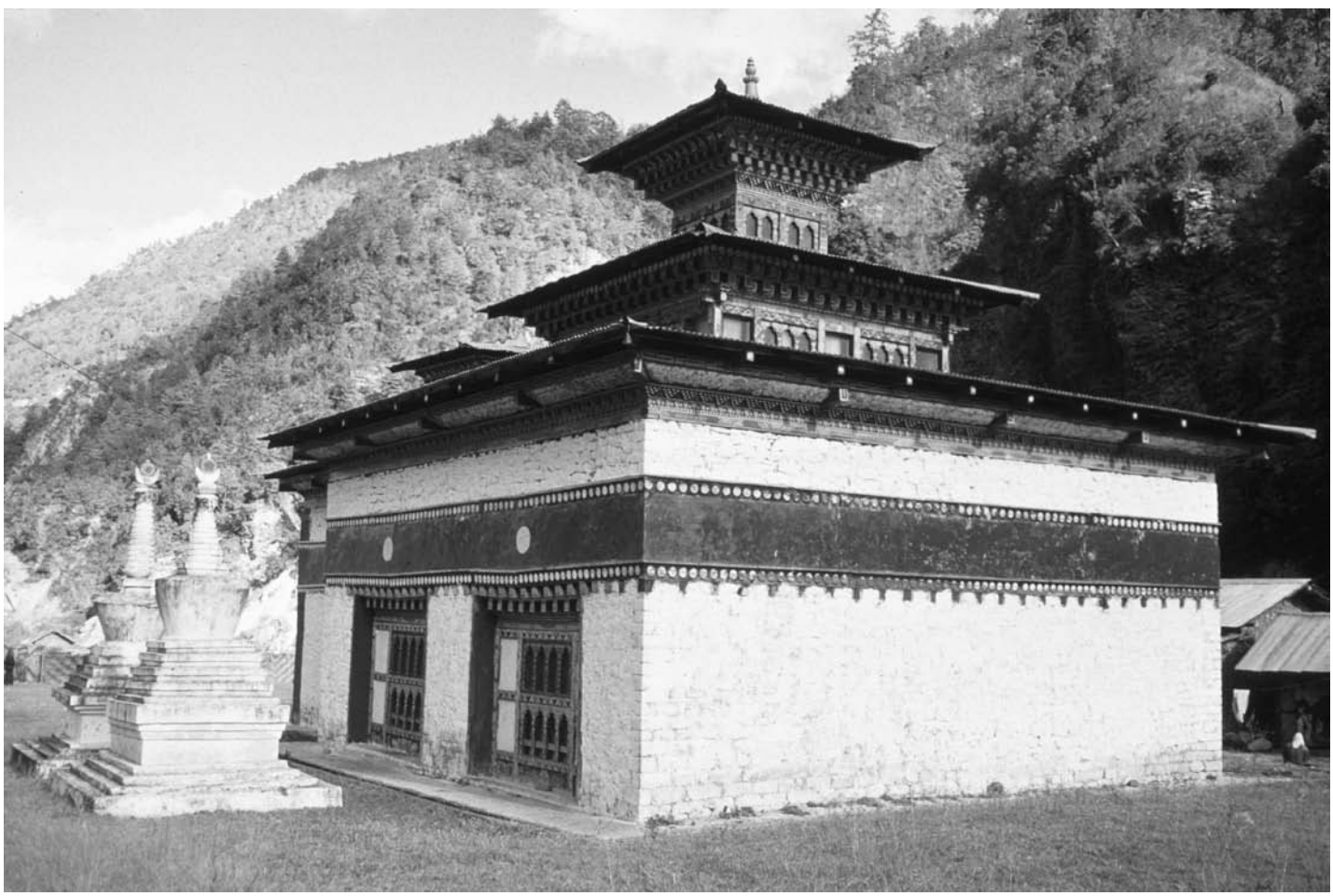
In the Inspection Bungalow, I started working on my drawings and writing. It was chilly. The I.B. lay in a narrow high valley where the sun rose late and went down early. A cold wind blew through the room, and even the closed windows rattled.

P. 089: entrance Sherdukpen house in D. 045, Chillipam, 1999.

P. 090: Sherdukpen house in D. 045, Chillipam, 1999.



D. 045: Sherdukpen house, reduced type, Chillipam – plan, sections and detail.



P. 091: Sherdukpen monastery (*gompa*), Rupa, 1999.

MIJI

Overview

Mijis (Sajolongs or Dhammais) build both longhouses for extended families and smaller ones for nuclear families. The standard pattern is a rectangular shape built on a raised platform. Materials used are wood and bamboo, and thatch for the ridged roof. Recent changes are a separate sleeping room for eldest couple and a storage room, both at the side of the house.

Commentary

I had read all I could about Mijis but found nothing about their houses. During research we had heard that they look very much like Nyishi longhouses.

We travelled to the village of Khelong, advised by a local official that it had longhouses. On the way, we picked up a man and a woman with a baby, and they told us that Khelong had no longhouses but another village, 23 kilometres farther, did have them. The man offered to takes us there, to Lapousa, where he had family living in a longhouse.

Following the Nafra River, then upwards through a side valley, we passed Khelong. Looking over the village from above, we saw one-family houses spread over a plateau and no longhouses. The houses were built on platforms, walls made of wooden planks, roofs covered with thatch, wooden slates or metal. We decided to go on to Lapousa.

At the insistence of our passengers, we took on two more hitchhikers, an old man, about eighty years old with strings of small blue beads around his legs, and a little boy. They went and sat on the floor in the back, although were seats. They were very dirty and the smell was penetrating.

Near the village of Nijung, which lies on a river bank with some longhouses, the old man, the little boy and the woman with the baby got out and disappeared below along a foot path toward the Dinai River. After a long descent, the road ended in the forest, near a shallow river, probably the one we had just seen. On foot we went farther, crossed a swinging suspension-bridge and followed a footpath uphill.

In Lapousa we saw at least one longhouse on a platform and a number of similar but shorter houses. Our local guide, the first man we had picked up on the road, led us to the longhouse (D. 046, P. 092 and P. 093). He greeted his family member, a cousin sitting on the front veranda. His wife was weaving, her back-strap loom stretched between her waist and the house wall. Jangnetang was the family name. We were welcomed and, after showing some of my drawings, allowed to look inside the house.

At first sight the longhouse did look like a Nyishi longhouse, except for the side room. 'That's a modern annex,' they said. 'It's the bedroom for the oldest occupant and his wife.' Usually the oldest occupant built a private bedroom for each of his wives.

We climbed up a tree-trunk staircase, with cut out steps to the front veranda, the place for sitting outside, receiving guests, weaving and pounding rice. It was also the place for ritual altars. Mithun skulls hung against the wall above the loom.

Going through the front door at the right side of the veranda, we entered the first room, the guestroom with a fireplace and trophy skulls of boar, deer, etc. 'The fireplace is mainly used to prepare the meat from the hunt,' they said. A narrow corridor switched the passage to the left side and led to the central hall, the domain of women and children. The four hearths in the middle were sunken in the bamboo floor, with a separate foundation. 'The right side of the fireplaces is for sleeping', they said. 'The double racks above the fireplaces are for drying firewood, rice, drying and smoking meat, and sterilising utensils.' In front of the rear wall was a row of four grinding stones. Pots for storing water stood in a built-out place placed 1.3 metres high in the left sidewall.

A door in the right sidewall led to the separate sleeping room for the oldest couple, with its own fireplace. Another door in the same wall led to a storage space built as an extension.

In the rear wall were two doors. The right one led to a storage annex also used as sleeping room, and the left one to a separate room with a fireplace used by women during menstruation. Behind this room were a toilet and an exit door. In their period the women were only allowed to enter the house through this back door.

Returning to the front of the house, at the right side of the guestroom was the chicken coop, which the chickens could enter up a little ladder from the veranda. Rice was pounded on this veranda, but a striking difference (in contrast with Nyishis and Adis) was the lack of a separate foundation for the mortar. This meant that the floor shook when the rice was pounded.

In the front yard a cement water-place had been built, waiting probably for water supply and tap. A bit further away were a sacrifice place for mithuns and a granary. At the right side of the house was the bamboo-fenced vegetable garden where some orange trees grew.

The house was constructed with wooden columns and main beams, bamboo cross-beams for the floor, flattened bamboo covering the floor and walls. The roof had wooden main beams and bamboo rafters, while the covering was of jungle grass, and originally banana leaf.

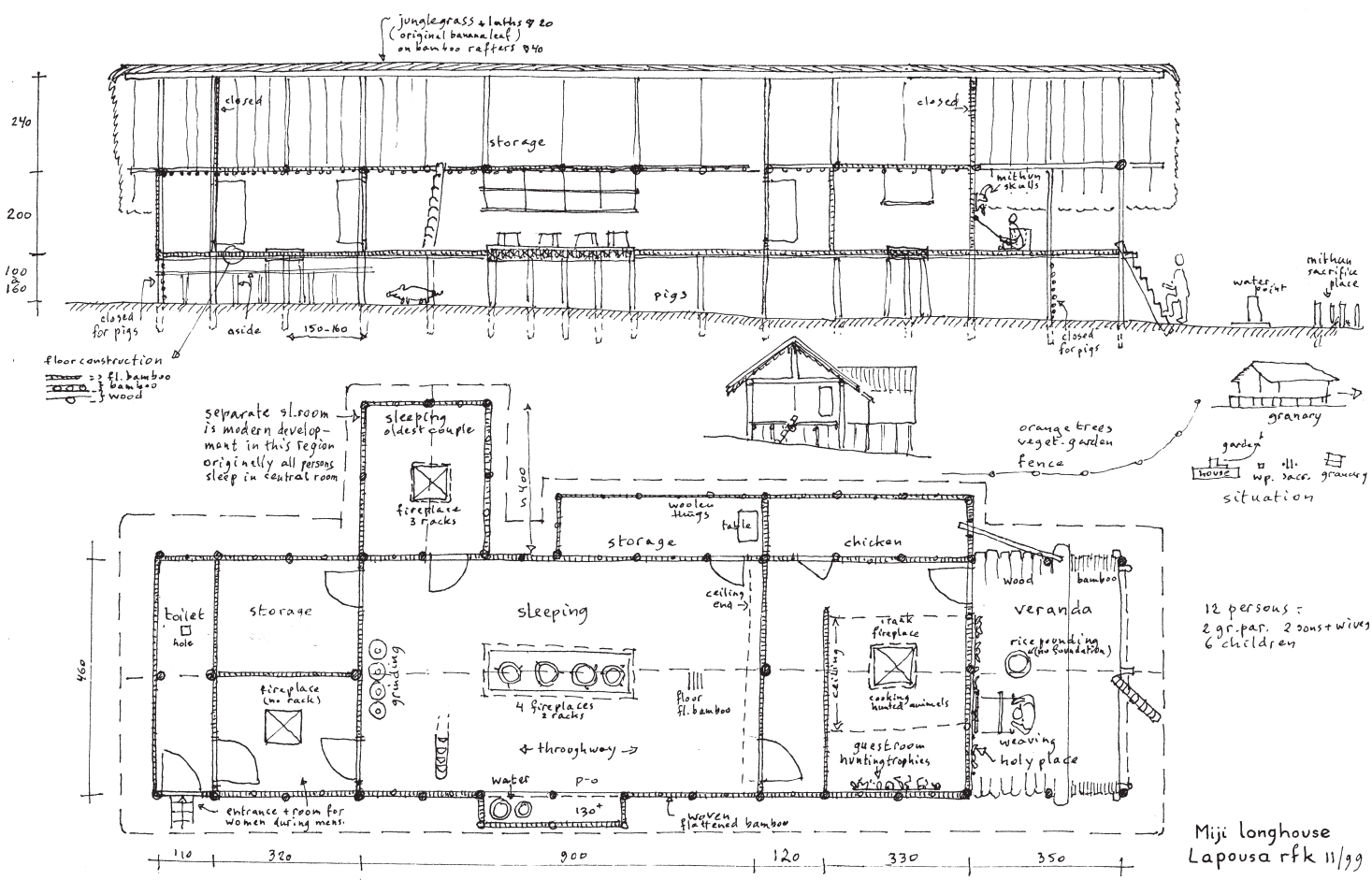
On second thought, the idea of a strong resemblance to the Nyishi longhouse seemed wrong. There were striking differences, such as the separate room for menstruating women, lack of a back veranda and mortar foundation and, most important, the guestroom, which we hadn't seen in any Nyishi longhouse. Of course, there was an external resemblance, but that was true for many other house-types in the northeast.

The next morning a local man came to tell us more about the Miji longhouse of the Jangnetang family we had visited the day before in Lapousa. 'That longhouse is not completely original,' he declared. 'The separate bedroom is a modern annex.' We assured him that we had already been told that. 'Yes,' he continued, 'but those bedrooms are a modern development in this area. Much farther away are more original villages and many longhouses – with no bedroom annexes. Everyone sleeps in the central room. The only partitions in the house are the guestroom and the room for menstruating women.'

Passing by Longtin village, we saw a longhouse with two built-out bedrooms, so (according to what they said in Lapousa) this owner should have had two wives.

High in the mountains we met a Miji man in traditional dress (P. 094). He came from far away and was going to Nafra town to buy medicines because he had a fever and felt ill. He wore a white tunic, a red scarf around his waist, necklaces of yellow and red beads on his neck and on his head a brimless cane hat with a triangular decoration of plaited bamboo. On his lower legs he wore cotton leggings to protect against insects and leeches, on his back a rain shield of vegetable fibres and on his feet rubber sandals. Giving him some money for his medicines and wishing him well, we said goodbye.

P. 092: front veranda of Miji longhouse in D. 046, Lapousa, 1999.



D. 046: Miji longhouse, with 7 fireplaces, Lapousa – plan, section and views.

P. 093: Miji longhouse in D. 046, Lapousa, 1999.

P. 094: Miji man on his way to Nafra to buy medicines, 1999.

BUGUN

Overview

Traditional Bugun longhouses were built on platforms with walls of wood and bamboo and with thatched roofs. They had a long row of fireplaces, one for every family, and looked like Nyishi longhouses, we were told. Now they have given way to small, wooden one-family houses with several rooms, also on a platform but with a metal roof.

Commentary

In the village of Bicham was, we were told, the last existing traditional Bugun house. After quite a long trip following a rough road through a pine forest, we finally arrived at the village, which looked rebuilt. The new architecture was a wooden 'bungalow' (or 'bungalow-type,' as it is called in northeast India) in New Bicham, built on a raised platform, but with several rooms and a metal-sheeted roof (P. 096). New Bicham also had a Buddhist ritual building built with wood on a raised platform and covered with wooden shingles (P. 097)

A few men invited us into the house of one of them. 'In this village are no traditional houses anymore,' they said. Seeing the drawings of Nyishi houses in my book, they commented: 'Yes, our houses looked very much like that, built on platform, walls of bamboo, the roof covers of palm leaf only, and then for 15 or 16 families and with a same number of fireplaces.'

Now they lived in smaller houses, made of wood, also on a platform and every family had its own house. They explained that they changed the house from multiple to one-family because the younger people didn't want to live like that anymore.

The village had 150 inhabitants, consisting of 30 houses and a government school where the children were taught in Hindi and English. Most people followed Donyi-Polo (a 'traditional' but formalised system of animistic beliefs and shamanistic practices), while one family was Buddhist and none were Christian.

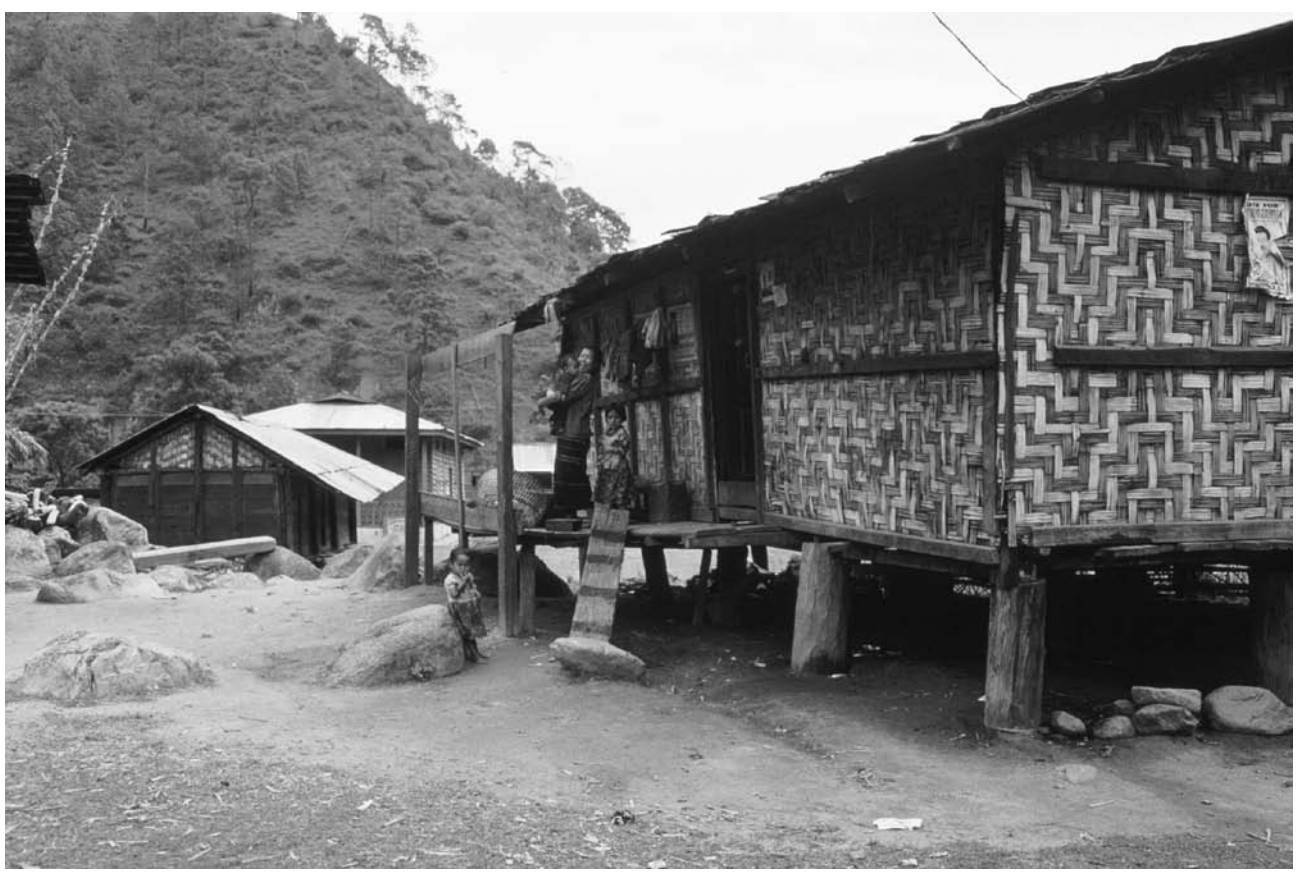
The village was situated on a high and rocky terrace between two rivers, Nafra and Dirang, which join here to form the Bicham River. The old village of Bicham, located downstream, had been dismantled and abandoned because a dam was planned to be built and a reservoir created. But it seemed that the water would rise so much that even the new village would have to be moved. 'The government will help,' they said. As of 2013, however, the dam had yet to be built.

The men wanted to show us the place where the old village had stood. Via a footbridge we crossed the raging Dirang River and went a few kilometres on the footpath along the Bicham. We recognised the site of the old village by the remaining farmyard borders and vegetable gardens. Only one little lop-sided house still stood and it would be taken down soon.

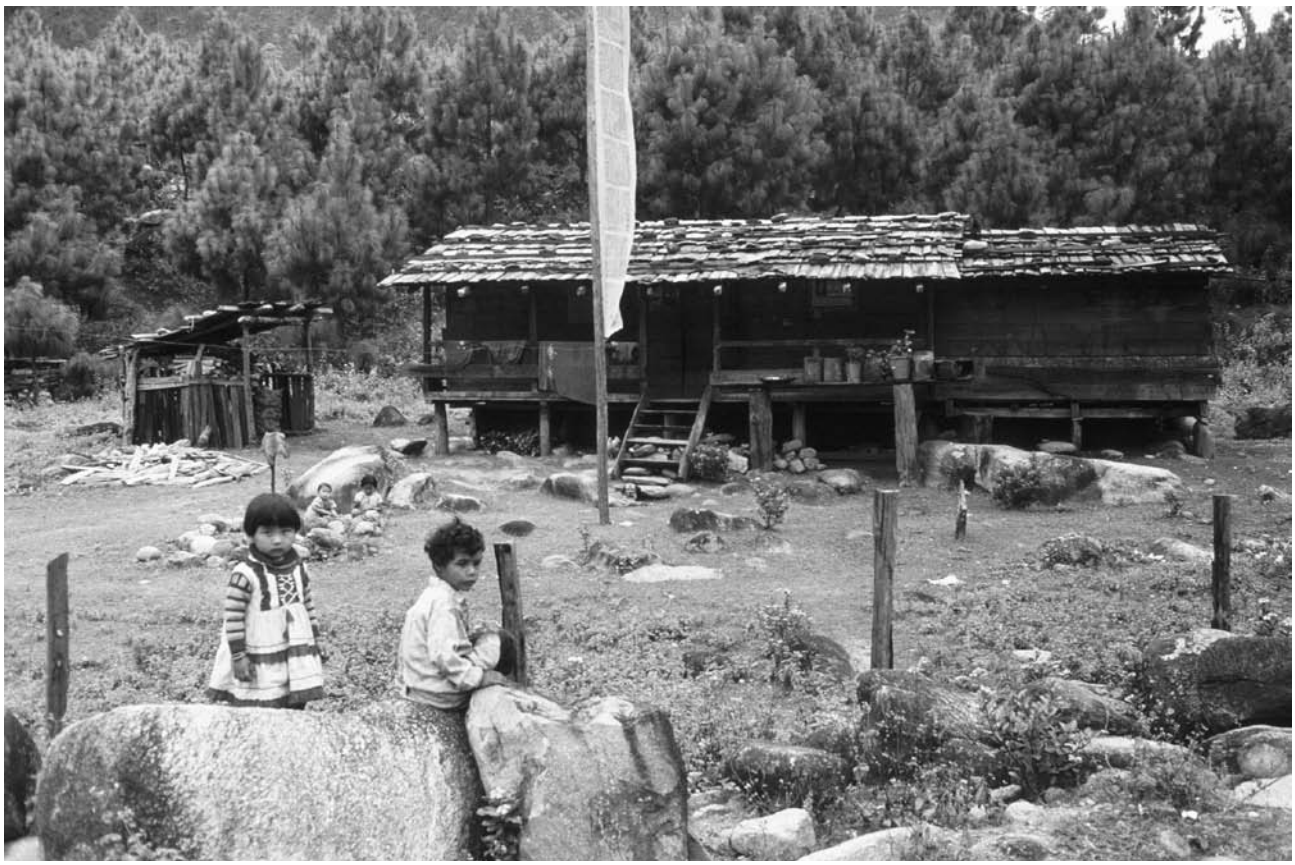
The house, which belonged to one family, was not a longhouse and was only 5 years old. Built on a platform, it consisted of only one room and a front porch. The room had a fireplace in the middle, pots and pans were stored against the back wall and clothes were hanging on a line along the side wall. The loft served as rice storage. The walls were made of flattened plaited bamboo, and the roof was covered with jungle grass. Under the house the openings between the posts were enclosed with flattened plaited bamboo to hold the pigs (P. 095).

One man invited us to his house to drink rice beer, which was very nice. The daughter, son and two nieces changed their clothes to show traditional Bugun dress and ornaments (P. 098). Over their white dress they wore red jackets with woven and embroidered patterns. The boy put on a woven straw hat, while the girls wore headdresses of conch shell and amber. All of it had been passed down from generation to generation and was similar to ornaments worn by Hrusso and Miji people.

P. 095: last remaining original Bugun house, Bicham, 1999.



P. 096: modern Bugun house, Bicham, 1999.



P. 097: Buddhist ritual building, Bicham, 1999.

P. 098: Bugun people with traditional dress and ornaments, Bicham, 1999.

HRUSSO

Overview

Hrussos (formerly called 'Akas') build both longhouses for extended families or multiple families and somewhat smaller houses for nuclear families; both are rectangular and built on a raised platform. The longhouses have a large central area, with one fireplace for each family. While wood and bamboo are the basic construction materials, doors and wall planks are large pieces of wood. Corrugated iron has replaced thatching on many roofs. Most Hrusso villages also have a ritual building and a communal hall or meeting place.

Commentary

Jamiri village is located in the Tenga River valley, miles from the main road along a rubble strewn track. In the middle of the village we saw a bamboo structure, dedicated to the sky-goddess and earth-goddess.

There was only one traditional longhouse in the village, about 35 metres long and 4.5 metres wide, with 11 fireplaces (D. 047 and P. 099). A local man explained, 'The longhouse is still in use, but nowadays most of us live in small one-family houses with metal roofs.' Even the longhouse, we noticed, had been recently covered with metal panels. 'In the past.' our self-appointed guide continued, 'the roof was thatched, but there aren't enough people anymore to help cover a roof with jungle-grass.'

He then assured us that the house was more than a hundred years old and that it had been even longer in the past. At the time of our visit, it was inhabited by eight families (of brothers and sisters), with a total of 35 persons, including 17 children and no grandparents.

House walls and floor had been built with wooden planks about 6 cm thick and some up to 70 cm wide. The walls were constructed in a special way with planks in three different rows above each other: first a horizontal plank, then a row of vertical planks and finally a horizontal plank again. The particular type of wood, we were told, is called *buncham*.

Through an impressive front door (P. 101), made of one piece and turning with pins in small bulges on the wooden columns and high doorstep, we entered the first room, which was the guestroom with a fireplace in the middle.

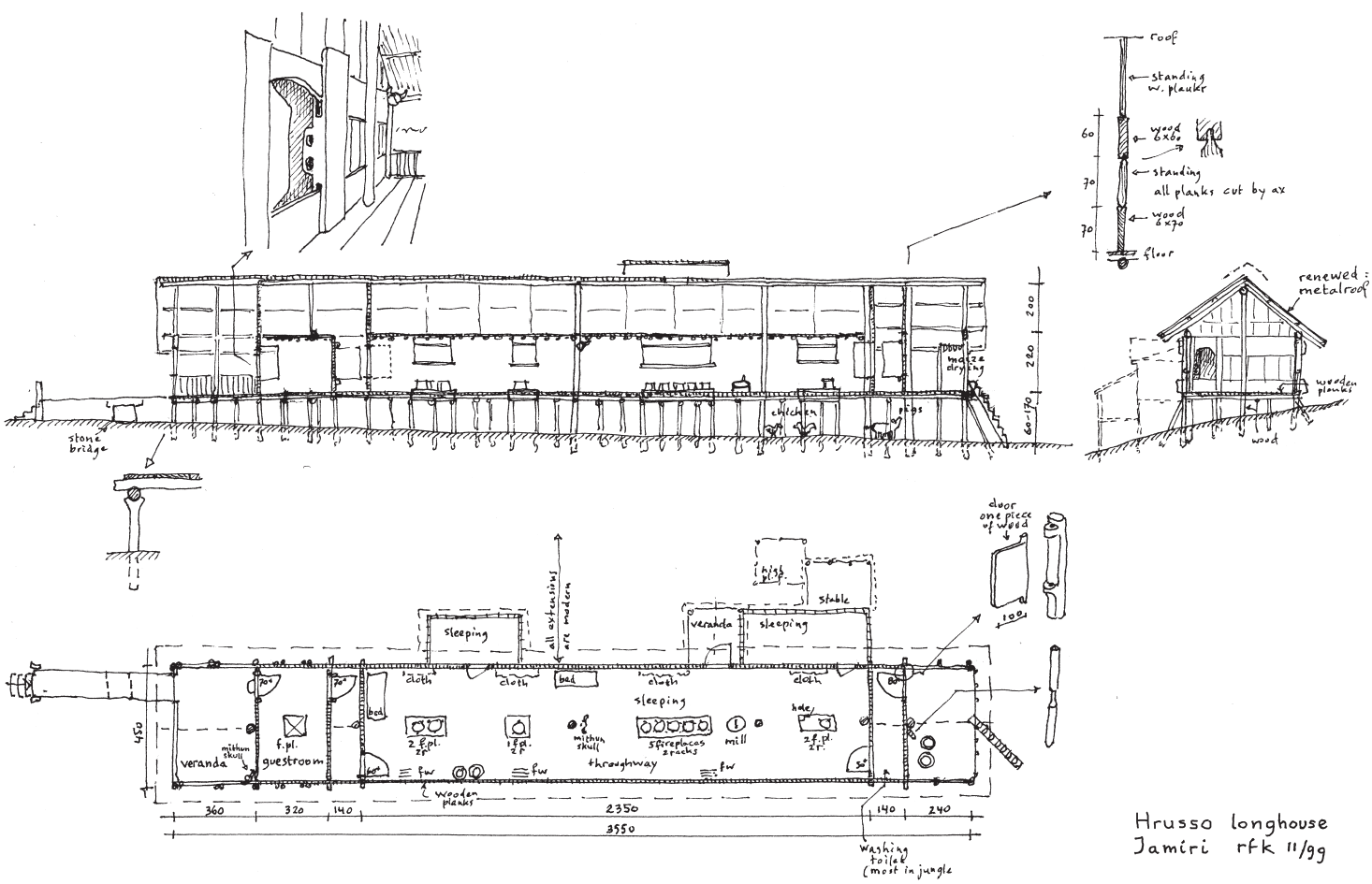
The next room was a general storage space and opened into the third room through a door to the right (this shift of doors from left to right was also found in the Miji house in Lapousa). This central space, some 23 metres long, contained no fewer than ten fireplaces in a row down the central axis, one after the other, with five grouped together in one hearth.

Through doors in the left hand wall were the separate sleeping places, and at the rear a door led into a small room that, after switching from right to left (the reverse of the switch at the entrance), led out to the back veranda.

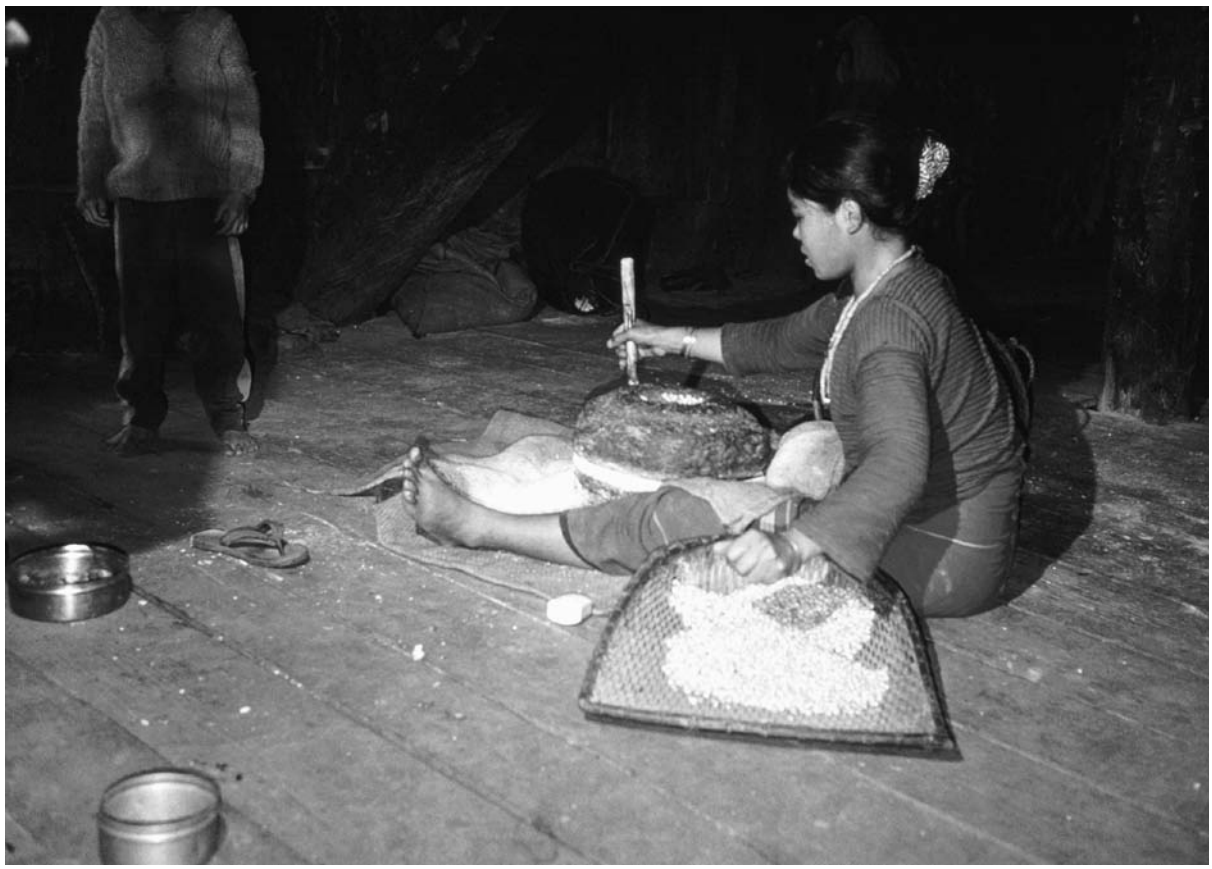
An old sick man sat on his sleeping-mat at the left of the group of five fireplaces, and next to him a child slept. As I drew, a woman was grinding millet, sitting just beyond these fireplaces (P. 100).

We thanked the people for their kindness and left. It was very hot as we went back along the same dirt track that took us to the asphalt road and across a bridge. Two hornbills flew up, very close. One of these large birds, white with black feathers and wide beaks, settled down on the top of a tree and then flew away with a swishing noise.

P. 099: Hrusso longhouse with 11 fireplaces, see D. 047, Jamiri, 1999.



D. 047: Hrusso longhouse, with 11 fireplaces, Jamiri – plan, sections and detail.



P. 100: woman grinds millet in Hrusso longhouse, Jamiri, 1999.

P. 101: front door of Hrusso longhouse in D. 047, Jamiri, 1999.

SULUNG

Overview

Sulung (also known as Puroik) settlements are small, with typically five to ten houses and no systematic plan. They are often located on isolated spurs near areas where sago palms grow. Houses are simple and of a rectangular type on a raised platform, accommodating a nuclear family. In case of more wives or families, each wife has her own room and hearth. Houses in interior areas, however, are said to be much larger, up to 5 × 24 metres.

The sections of the house are: front veranda with ritual space; a central room with one fireplace; a narrow corridor-like side room for storage and toilet; rear veranda for storage. A notched log leads to both verandas. Granaries are built at some distance from the houses. The materials used for building houses are wood and bamboo, cane for joints and banana leaves or (more modern) bamboo matting for the roof.

Commentary

In Seppa we met Mrs Hopo, a Bangni lady from Chiyang Tajo, who told us that she knew a Sulung village, called Sanchu. We drove to Chiyang Tajo, which is a minor government post (Circle Headquarters) at the end of the road and 1,800 metres altitude. Sushil drove the 81 kilometres from Seppa in about four and a half hours, which was fast, given the condition of the road. Passing by scattered small houses with metal roofs, we went to the Inspection Bungalow and spoke to the watchman and the Circle Officer. 'You are the first foreigners to come here,' they said. From the I.B. we had a marvellous view over the Kameng River valley and the snow-capped Himalayas behind.

Four young boys sitting nearby looked curiously at us, and one spoke English. We asked him about Sanchu. 'We know the Sulung village you want to visit,' he said and added that he was willing to take us there that afternoon.

An Intelligence Department officer took note of our papers. On his advice, we spoke to the local Block Warden, Mr Doley, a nice man from Majuli Island in Assam. We talked about local problems, like transport.

Officially there was a bus service from Seppa once a week, but sometimes the bus didn't come at all. Supply of diesel was also a problem because the lorry hadn't come, and so the generator couldn't work and there was no electricity. And for some time the high tension cable from Seppa had been out of action. Mr Doley thought the diesel wouldn't arrive for a long time.

We talked about the Sulungs. He explained that they were poor and still dependent on Bangnis and Nyishis. In fact, slavery had not really disappeared. He agreed with what the Additional Deputy Commissioner in Seppa had told us yesterday about the government project to buy the Sulungs' liberty: the problem is the Bangnis would get richer while the Sulungs would stay poor and keep working as their servants. Education would be very important.

We started our walk to Sanchu. The four young boys, seven to twelve years old, showed us the way. Along a narrow footpath we first climbed some 300 metres, using our umbrellas against the sun. It was a steep climb as we crossed small streams, rough clay bumps and boulders. Occasionally we rested. Knowing that Sulungs preferred living in the mountains, we hoped the village lay on a high plateau. But reaching the pass, we saw the village far below us on a plateau halfway down the mountain slope.

The descent went easily, but we realised only too well that later we would have to climb back up it. The English-speaking boy told us that he went to school and worked in a tea-shop. He didn't earn money, but his boss paid the school fees and bought him pen, paper and school books.

During the descent, now in the shadows along steep and slippery parts, the boy told us about particular plants and warned us about the poisonous, thorny ones we almost touched. After one and a half hours, going up and down, we reached the plateau where the village lay.

At the front of the village were a little school and the house of the schoolteacher. The village itself consisted of ten houses on platforms, most of them with the new style of flattened bamboo matting on the

roof. Just one house had the older roof cover of banana leaves. This was also the only house where people were at home at the moment and where we could ask if we might have a look inside. The other villagers were away, working for the Bangnis, as we had been told they would be.

The house owner was Mr Da, the village priest, and a helpful man. The hair knot on his forehead, pierced with a pin, looked like that worn by Nyishis, but he also wore a special hat with tiger-skin and eagle feathers.

The house was rather small, containing one room, and front and back verandas, both accessible via tree-trunk stairs. The house was built on a light slope, with the front veranda highest above ground. As I started to make my drawing (D. 048, P. 102 and P. 104), Mr Da said, 'We live here as one family, my wife and I and our four children.' Inside he offered a little bench and gestured for us to sit down. We sat around the only fireplace and looked about.

The fireplace lay in the middle of the living-room, while the passage was on the side where we sat. 'The other side of the fireplace is for sleeping at night,' he explained. Next to the passage was a narrow enclosed space used to store firewood and as as toilet. The fenced-in space under the house sheltered the pigs at night. The back veranda was half used as storage for firewood, baskets, etc. Finally Mr Da took us to the front veranda and showed the ritual space with mithun skulls and hunting trophies.

Some men, it appeared, had come home. On the village road a man sat while he split and flattened bamboos (P. 105). After being dried the strips are used for floors, walls and nowadays also for roof covering. Next to the priest's house two men were building a granary; they were just then using cane to tie the bamboo matting on the roof to the frame (P. 103).

After some time of looking around, we got the strong impression that the villagers, no matter how nice and helpful, were getting nervous or even anxious—perhaps they expected problems with the Bangnis because of our visit.

After saying goodbye and thanking them for their kindness, we went back along the narrow footpath, always climbing. Now and then we had to stop; it was very steep and tiring. From the pass we looked once more down to the village far below. A man with a pipe and two women each carrying a basket of firewood on their back came from behind and passed us. It was amazing that people made this journey once or twice a day, along this steep path, and they did it so easily.

Descending to the Inspection Bungalow, darkness fell, and the peaks of the Himalaya contrasted with the coloured evening sky. The boys got tea for us from the tea-shop and a kind of flour-balls to have something to eat.

It was pitch-dark in the I.B. and in the whole village: no diesel and no electricity. We lit our candles. Mr Doley came along to remind us of his invitation for dinner. A bit later his son and watchman came to take us down to his house, where, it appeared, the watchman had cooked for us. A few candles burned to provide light.

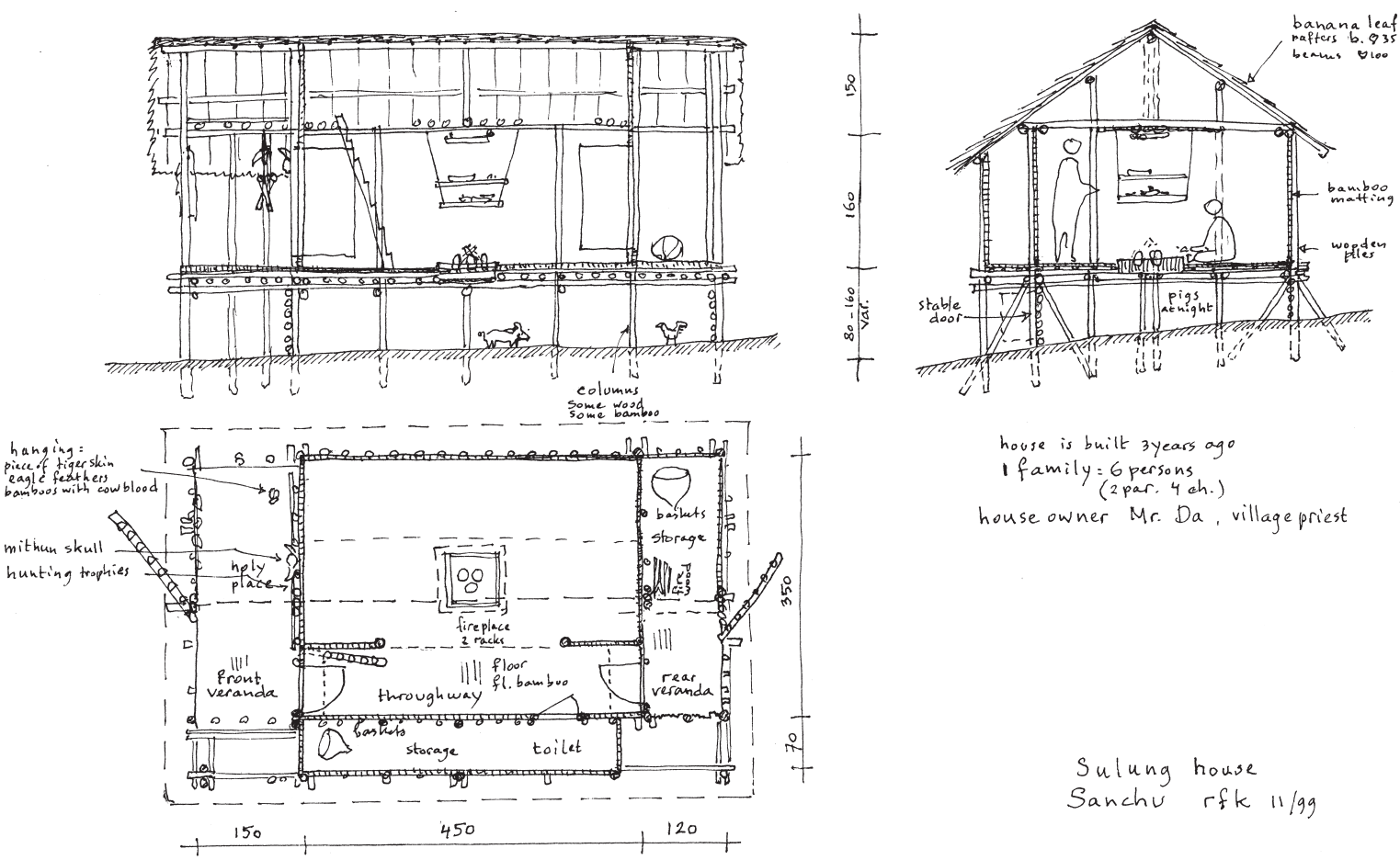
Mr Doley asked about my impressions of the differences between Sulung and Bangni or Nyishi houses. I told him that in Sanchu there were no longhouses like the Bangni had and that the Sulung one-family house was much smaller than those described in R.K. Deuri's 1982 book on the Sulungs. Deuri described one-family houses that were 4.5 to 5 metres wide and 9 metres long, and multi-family houses that were 24 metres long. By contrast, the one-family house we saw in Sanchu was only 4.2 by 7.2 metres. 'That's because the Sulungs in this area are here just for work,' said Mr Doley. 'They live on land owned by Bangnis and are not allowed to use too much materials. In remote areas, where they are less dependent on Bangnis, much higher in the Himalayas and several days walk from here, they have larger houses.'

When we left next morning, it was still dark. Above the grey silhouetted mountains rose the snow-caps of the Himalayas, contrasting with the dark sky – a marvellous sight. Touched by the rays of the rising sun, the peaks began to shine and change colour, from orange to rose, from rose to yellow, from yellow to white.

Along the road, not far from a Bangni village we saw small houses on platforms, with front and back verandas, a bit asymmetrical because of the narrow side space and the lower extending roof. These clearly were Sulung houses, which now we were able to recognize.

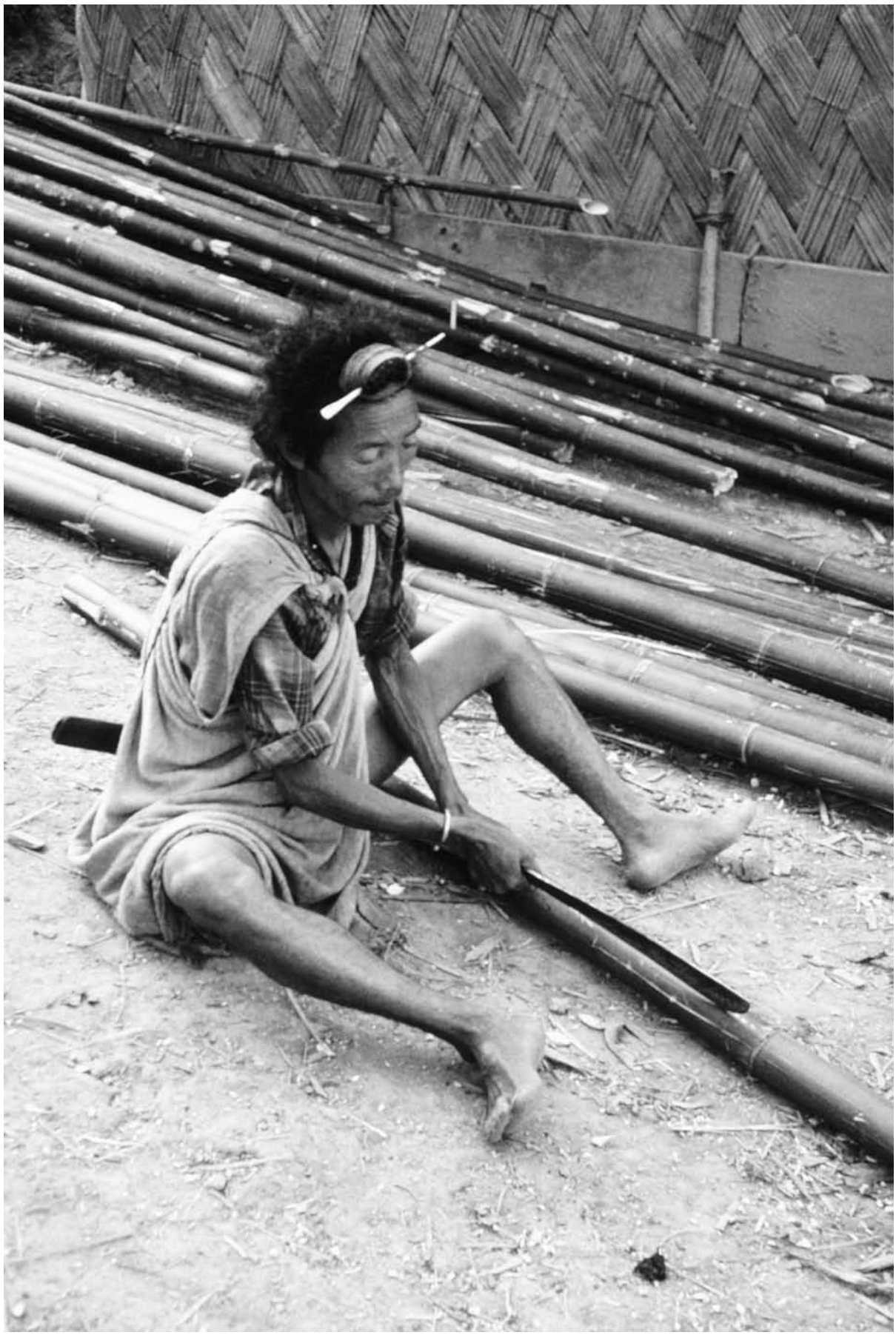
P. 102: Sulung house in D. 048, Sanchu, 1999.

P. 103: Sulung men covering the roof of a granary that they are building, Sanchu, 1999.



D. 048: Sulung house, Sanchu – plan and sections.

P. 104: a Sulung village priest with his wife and neighbour, Sanchu, 1999.



P. 105: Sulung man splitting bamboo, Sanchu, 1999.

BANGNI

Overview

The Bangni longhouse is indeed very long and resembles the Nyishi pattern from the outside. As elsewhere, the primary building materials are wood and bamboo, but new houses have corrugated metal roofs and some use concrete for construction.

Commentary

We followed the Kameng River upstream and saw villages with the characteristic longhouses of the Bangnis. A hanging bridge led to fields where people were binding cut cane together. The paddy fields stretched out and we passed Pampoli village with new wooden houses, fish farms and a government agricultural farm. Much of the forest slopes had been cut and planted by slash-and-burn or *jhum*.

The wildly flowing Kameng River seemed to be 50 to 70 metres wide, but estimating was difficult. An auto rickshaw standing along the road was a sign of approaching a town, and an iron bridge took us to the other side and then to the district capital of Seppa.

Leaving Seppa, we continued upstream along the Kameng, which was broad. The high banks of rocks and sand showed the water could rise some two to three metres. It was heavily clouded and the mountain-tops were not visible.

On the far side of the river lay Talong village, which was inaccessible (there was no bridge). This beautiful Bangni village had two longhouses with front and back porches and a number of small houses and granaries, all on poles with platforms and thatched roofs.

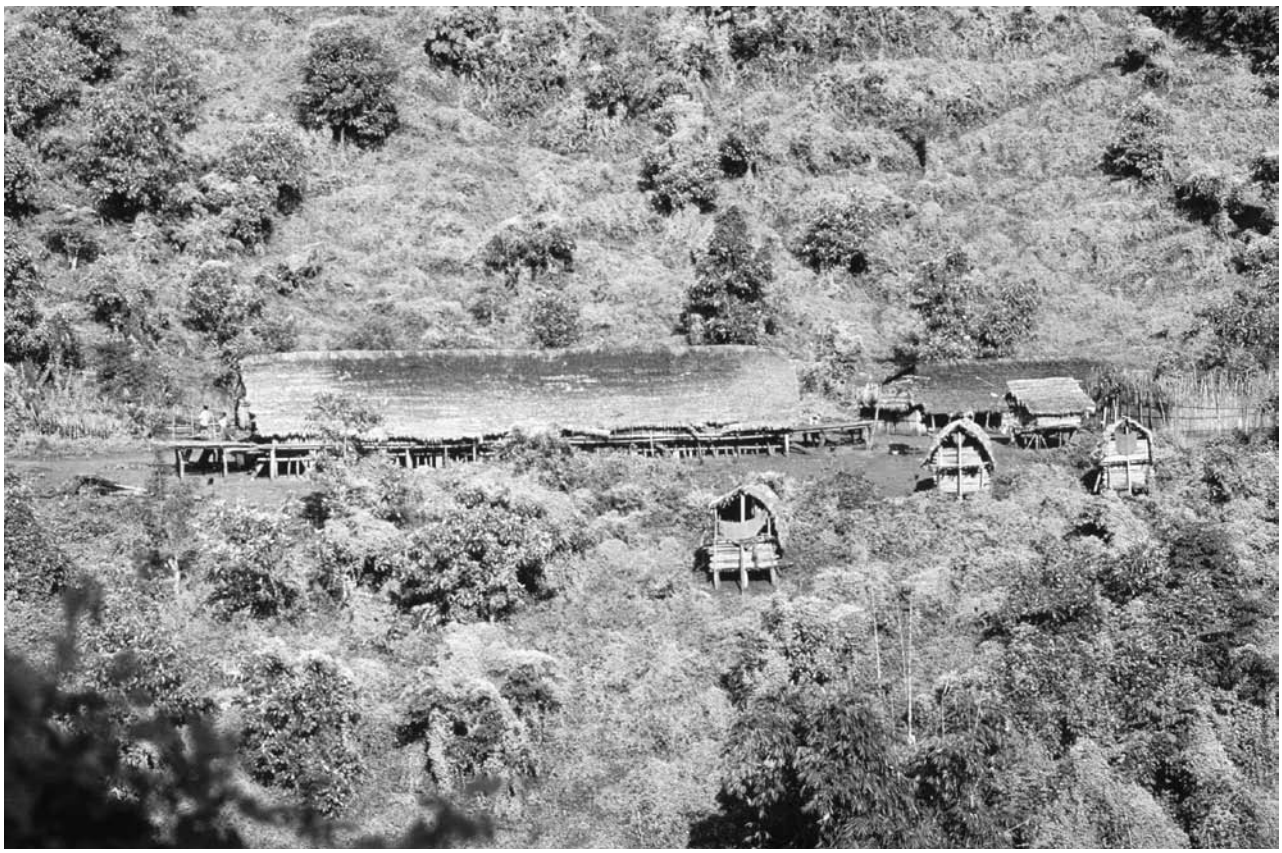
A passer-by knew the village and gave us this information: 'The biggest longhouse has six fireplaces and is inhabited by 10 couples and their children. The house consists of one oblong space, but recently at both ends separate bedrooms have been made. One of the small houses is the pigsty and toilet. There is no bridge, just a canoe to get to the other side, but at the moment the water is too strong.'

Higher up the valley narrowed to a V-shape, with steep rising banks. We passed a village with some houses covered with banana leaves. Continuing past Pakka, we saw a lot of new houses with metal sheets on the roof and now and then one built with concrete.

Near Pakka, we found a bamboo structure from which egg-shells hung (P. 107). A man told us that 'it's a place for sacrificing mithuns; we do it to cure an illness.'

Returning, we again saw Talong village on the far bank, with the two longhouses, a number of granaries and a group of small houses, probably Sulung. We were told that the largest longhouse was about 30 to 35 metres long and had five fireplaces, not six as the other man had told us before. It would have been lovely to make a drawing of the ground-plan, but the river was still too wild to cross by canoe. Nearby we saw the broken foot-bridge the man had mentioned. To get a better image I used our binoculars and took photos with the telephoto-lens (P. 106).

South of Seppa, on the far side of the river, we saw a Bangni village with a collapsed longhouse and a number of Sulung houses. Seeing a suspension-bridge, we followed a footpath down, clambered over boulders and then over a tree trunk lying on the ground. After some flat land we reached the river-bank, but the cables of the bridge were unequally stretched and some parts of the bridge-deck were missing or broken. Our driver, Sushil, had no fear and was already halfway across, but I thought it was too risky for us and we decided not to cross. A pity.



P. 106: Bangni longhouse, Talong, 1999.

P. 107: Bangni sacrificial altar of bamboo, near Pakka, 1999.

NYISHI

Overview

Nyishis lived, and some still live in large longhouses, with several hearths, in settlements perched on spurs and hilltops.

The longhouses are built on a platform on poles, with front and rear verandas, and a fenced garden. The houses we saw consisted of one very long room with six to nine fireplaces for 40 to 60 persons. Every family has its own fireplace. Indeed, a longhouse sometimes constitutes a whole village.

In the hall sometimes one or more sleeping rooms are separated, which is a modern development. The materials used are wood and bamboo for the main construction, woven flattened bamboo for floor and walls, and thatch or bamboo for covering the roof. The trend is for younger people to live in single-family houses, mainly built like the longhouses but shorter.

Commentary

Vaath is a Nyishi village not far from Itanagar. All the men carried a large machete in a sheath hanging off their shoulder. Older men wore the typical Nyishi hat with a hornbill beak on top (P. 112). We were shown the house of a Mr Atchi, a dwelling for one family with eight people (D. 052), which consisted of one big room with front and back verandas.

In the middle of the big room was a fireplace with three racks above. On the lowest was a flat dish with paddy which had to be dried before pounding, while the upper ones had firewood. At the back of this large room they had made a separate, small sleeping room for the parents. An older son was building a new house for himself, a bungalow-type on a concrete plinth.

The village had nine shorter houses on a platform. Their materials looked traditional, and each had six to eight people living inside. But there were no longhouses as you would expect to see in a Nyishi village. It was too close to Itanagar.

Boys and girls slept with their parents, without any dormitory system. When I asked why they build on a platform, they looked at me in bewilderment and said, 'It has just to be done in that way.' However, the younger ones didn't like it anymore.

The house main construction consisted of wooden poles driven into the ground, with fixed wooden beams in both directions at the height of the platform and at the top. The floor beams, wall studs, purlins and rafters were bamboo. The floor cover was flattened bamboo, the wall cover was woven, flattened bamboo and the roof was covered with palm leaves.

There were only two central columns, one in each head-wall. All the wood-joints were made with cane. The floor consisted of a double layer of bamboos, with the upper layer at right angles to the under layer, and a floor cover of split and flattened bamboo lying in one direction. The doors in the head-walls, including the hinge-joints, were made of one piece of wood.

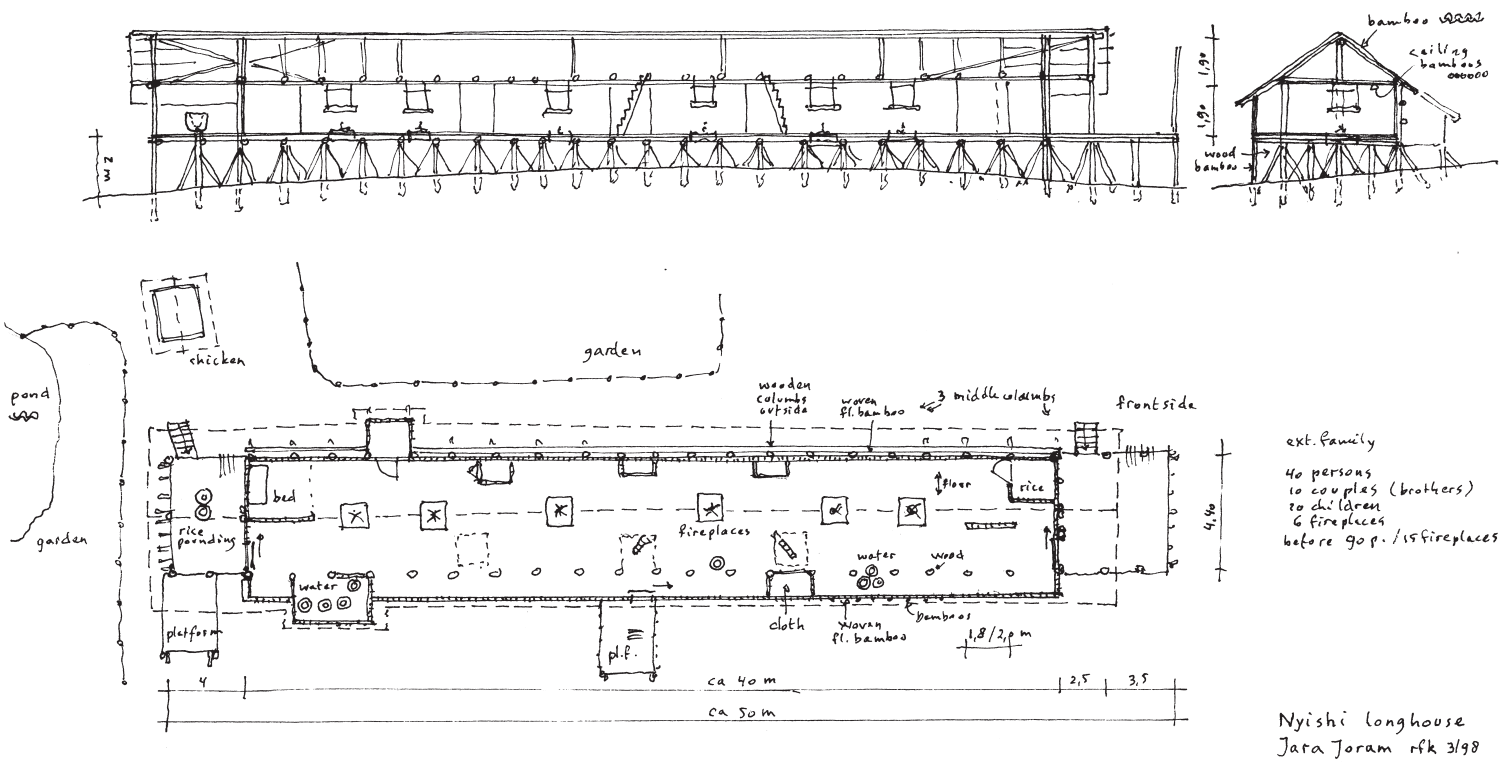
Mr Atchi's house was eight years old. 'The building materials last for different amounts of time,' he told us. 'The type of hardwood we use (locally called *chapa*) is good for more than 15 years, bamboo (depending on quality) two to five years, the split bamboo for the floors about two years, and the palm leaves for the roof have to be renewed after two years.'

Next we visited Jara Joram, not far from the Apatani valley. Aka, an Apatani lady who had told us about a huge longhouse in this Nyishi village, accompanied us.

After a night with heavy thunder, and with little hope of the weather getting better, we went along a narrow winding road through the rain and fog.

After arriving, we walked in the rain to the longhouse built on a platform and measuring 50 metres long (D. 049 and P. 108). We entered the house through the back porch, and in the dark we distinguished a row of six fireplaces, with nearly all the fires burning. In the glow of the fires, and feeling that the people sitting around them were looking at us, we walked over the springy bamboo floor to the other end of the room. At the last fireplace we were welcomed and invited to sit around the fire. They gave us beer to drink. Aka asked if I would be allowed to draw the house, which started an animated conversation between her and the hostess.

P. 108: Nyishi longhouse, 6 fireplaces, see D. 049, Jara Joram, 1998.



D. 049: Nyishi longhouse, with 6 fireplaces, Jara Jorum – plan and sections.

After a few sips of rice beer, and now accustomed to the dark, I got up and started the survey of the house. To be able to draw I had to hold my paper under a gap in the roof cover. I got light but had to avoid the dripping rain.

The longhouse was built very systematically, based on a large number of bays of about the same dimensions. It was 4.40 metres wide and about 40 metres long without the verandas, and 50 metres with them.

The enclosed part had 20 bays, the front veranda had three and the back veranda two, so 25 in all. In fact, the house interior was one long open space. Only at both ends a small room had been partitioned, at the front for rice storage and at the back for sleeping. On the side a narrow addition functioned as water storage and washing place.

The whole house with the verandas had been built on a platform, and the support poles were shored up. Only three central columns reached as high as the ridge-beam, while the other ridge-beam supports stood on the collar-beams; the use of trusses was unknown. The roof construction was made more windproof by tied crossing laths.

Mr Joram Bhai, the owner, was the eldest son. '40 people live in this house,' he said. 'About 10 couples and 20 children.' Together they formed an extended family: a grandmother, a number of brothers and their wives and children. The hat of the deceased grandfather was shown to me, with hornbill beak and feather.

The oldest son and his mother were willing to be photographed, but only in their traditional clothes. Both turned up with a rough silk cloth wrapped around them. The mother had a belt of 70-year-old bronze plates and discs in her ear-lobes. The son was wearing his father's (now his own) hat and his inseparable machete (P. 109). They told me that in the former times the house had had 15 fireplaces and 90 people had lived here.

My ground plan showed a few open places between the fireplaces, which meant that every second bay would have had a fireplace. So, with 20 compartments there could have been 10 fireplaces. I said, 'If the house had 15 fireplaces, as you mentioned, the house must have been shortened.' They answered, 'That's right, and with our way of building that's no problem.' They also added that the roof covering of bamboo was borrowed from their neighbours, the Apatanis. 'Before we used jungle grass,' they said.

We visited the Nyishi village of Talo, also not far from the Apatani valley, but further west and north. Before arriving, from the opposite mountain slope, we were able to see something of the village, a few scattered houses in the haze. One of them looked more beautiful and even longer than the one in Jara Joram.

After getting permission of the house-owner, I made drawings. The longhouse was located strategically on a protruding mountain ridge: steep slopes on three sides and a narrow, easy to defend, entry on the fourth. The construction looked very much the same as in Jara Joram, only the bays were a bit narrower and the condition of the house was better (D. 050 and P. 110).

The house contained 32 bays, while the front veranda added two and the back veranda five more. The house had nine fireplaces, but the structure suggests that there must have been more. At three places they had made separate sleeping spaces by means of small, half-open walls, to give a little privacy. The front veranda was the rice pounding place, with two rice pounding vessels, on a separate foundation. On the back veranda was the ritual place, with plumed bamboos reaching above the roof.

In the back yard, outside the fence, stood two big bamboo structures. The one on the right was the grave monument for the deceased grandfather, and the left one was for sacrificing mithuns.

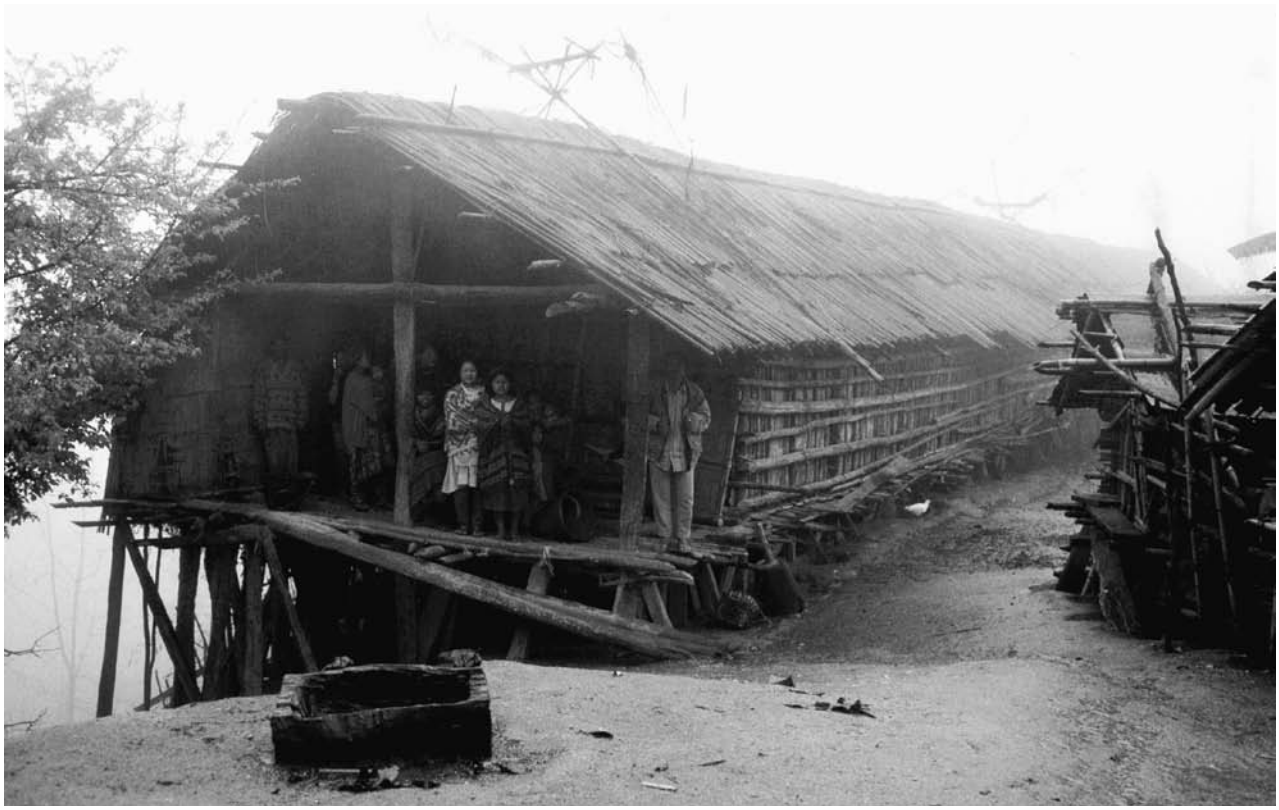
Inside the house, between the first and second fires, they showed me a second ritual place with a mithun skull on the wall. Near the second fire a woman was sitting with her back to the fire and thus to the light. She was weaving on a back-strap loom, but how she could distinguish the different coloured threads in the dark was a mystery to me.

60 persons lived in this house, 16 couples with children. The nine fireplaces were used by different couples. The occupants belonged to one extended family: grandmother (grandfather, who used to own the house, had died), and several brothers with their wives and children, as with the house in Jara Joram. The house-owner was now the oldest son, Mr Toko Saha. A remarkable fact was that 50 kilograms of rice were used to feed those 60 persons at every meal.

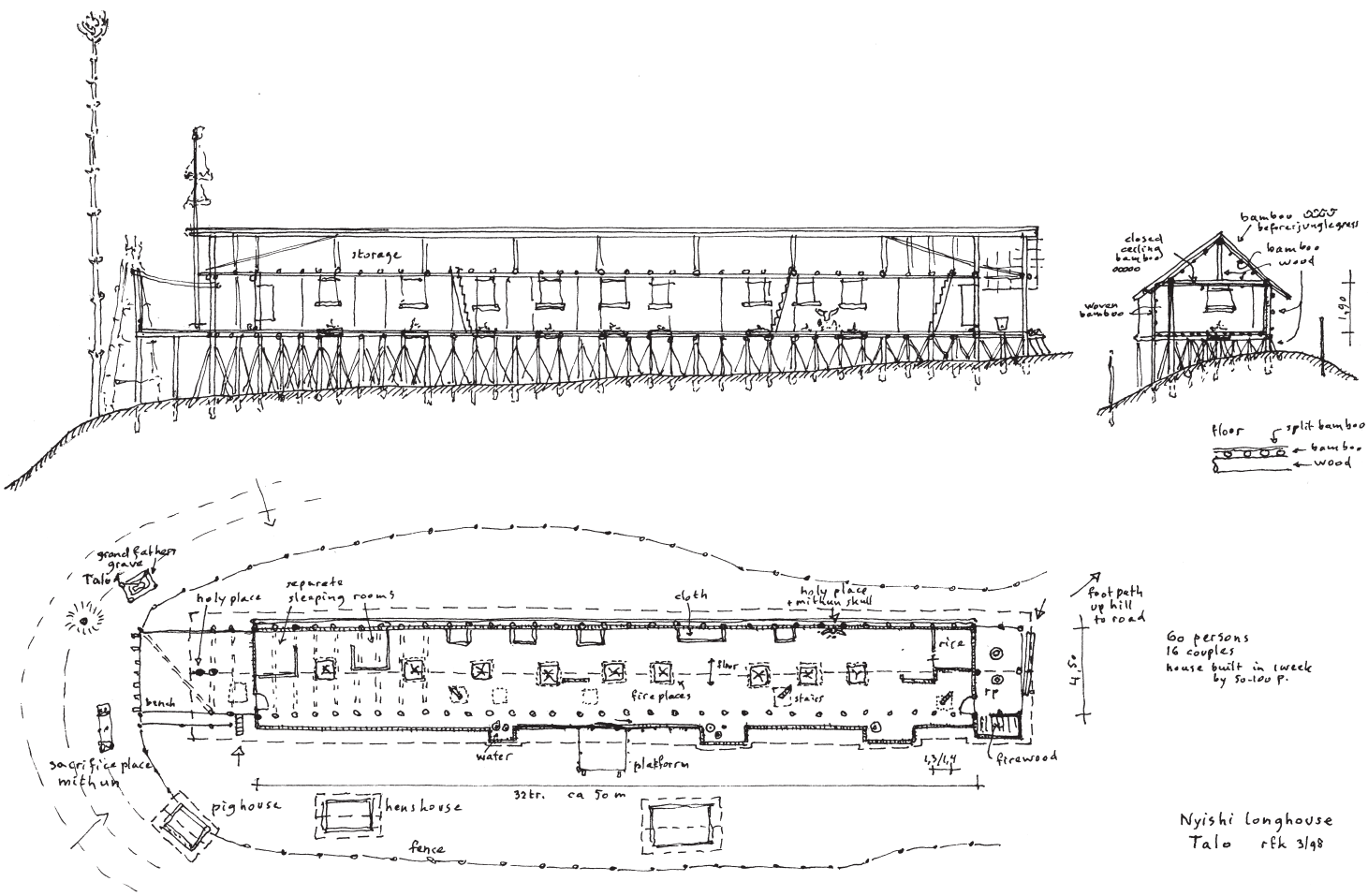
They said, 'The house was built in one week with 50 to 100 persons helping. They used wood, bamboo and cane. The house is now 10 years old, and the bamboo roof-cover also. In former days the roof was covered with jungle grass, but bamboo lasts longer and doesn't irritate the skin so much as jungle grass.'

Next we took a long journey toward the high Himalayas. On the way, we descended into a narrow and deep valley with the small Nyishi town of Palin. We were invited to look in a two-family house, built

P. 109: oldest son and mother in traditional dress, Nyishi longhouse, Jara Joram, 1998.



P. 110: Nyishi longhouse, 9 fireplaces, in D. 050, Talo, 1998.



D. 050: Nyishi longhouse, with 9 fireplaces,Talo – plan and sections.

traditionally with thatched roof but modernised ground-plan with separated sleeping rooms (D. 053).

The last Nyishi village we visited was in a remote area, high in the mountains in the narrow valley of the Kurung River near Koloriang. On the slope above Koloriang lies Taypa, a traditional Nyishi village, and a young Nyishi man was willing to take us there. The sky was heavily clouded and it rained a little. As we climbed up a footpath, Koloriang slowly disappeared out of sight.

Taypa consisted of some 10 to 15 platform houses. Beneath the village on a small plateau stood the house of the school-teacher and beside it a small open-air school. The teacher invited us for tea, but we politely explained that we must first see a house and make drawings. Between fenced vegetable gardens, small fishing ponds and houses, we climbed up.

Because of the steep slope and orientation, most houses stood with their axis in the direction of the slope, which made the front entrance almost at ground level and the back veranda several metres off the ground. We chose a characteristic house to study.

Luckily the owner, Mr Nikga Chongpy, was at home and was willing to show us the house (D. 051 and P. 111). It was about 16 metres long and 6 metres wide, not counting the overhanging roof. There was no front veranda, just two narrow and enclosed side verandas and a wide back veranda. Up the steps and through the front door at the right side, we followed Mr Chongpy into the large living-room. The fireplaces lay left of the central axis, and at the right was the passage connecting the front and back doors.

The sleeping spaces around the fireplaces were partially separated by partitions. Parts of the side verandas, which were mostly storage spaces, were open to the living room. Near the second fireplace, Mr Chongpy pointed to a large, plaited bamboo funnel for producing rice-beer. Next to it on the floor lay a flat stone for grinding spices.

Entering the raised back veranda, we enjoyed a wonderful view over the village, valley and opposite slope. Here were the ritual place with mithun skulls hanging on a wall and the place for pounding rice, with the mortar on a separate foundation, and wooden pestles on the floor.

The main construction of the house was wood, while the floor-covering and walls were of split, flattened bamboo, and the roof-cover used banana leaves.

Mr Chongpy said, 'We live here as three families, altogether 15 people. The first fireplace belongs to a family of one man, his two wives and two children. The second fireplace belongs to the other two families: one man, his wife and two children, and another man, his two wives and three children.'

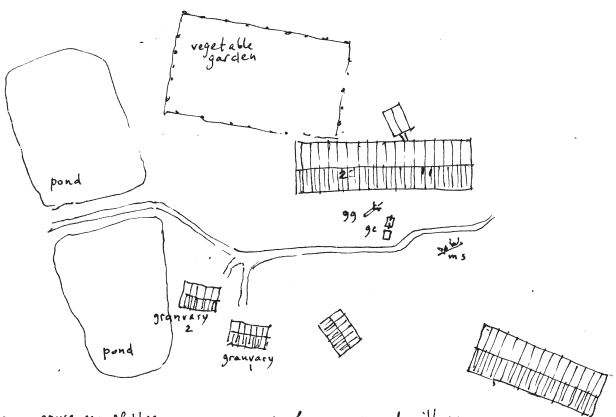
There were two granaries, belonging to same families who used the fireplaces. Only the second family had a pigsty, which hung between the poles under the house. The toilet above it was reached from the back veranda. The old pigsty, which stood apart yet connected with the house, was not used anymore.

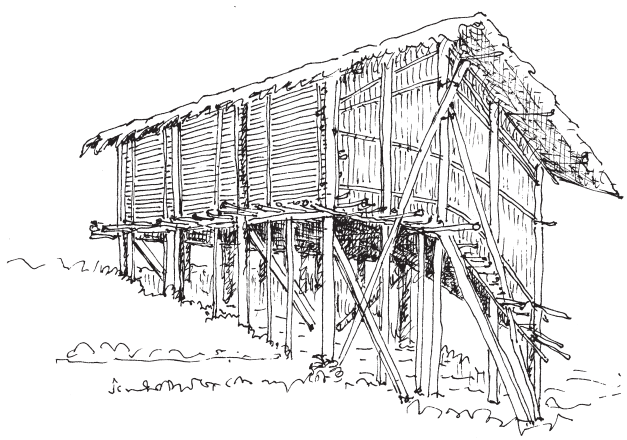
At the other side of the house Mr Chongpy showed us a single standing bamboo that represented the grave of the grandfather. Nearby were two little stone monuments, one with mithun horns, to commemorate two dead children. Here, too, was the sacrificial place for mithuns, marked by a bamboo structure. The two granaries stood a bit farther away. I made a drawing of one, which had a typical floor that sagged down at one corner (D. 051).

Slowly going down we passed by the little school, but nobody was there anymore. The open classroom structure was not more than a flat roof on poles with the lower ends stuck into the ground. The small benches and tables, made of wooden branches, also had their legs stuck into the ground. Against one of the poles hung a blackboard, and on its narrow shelf lay pieces of chalk and a duster.

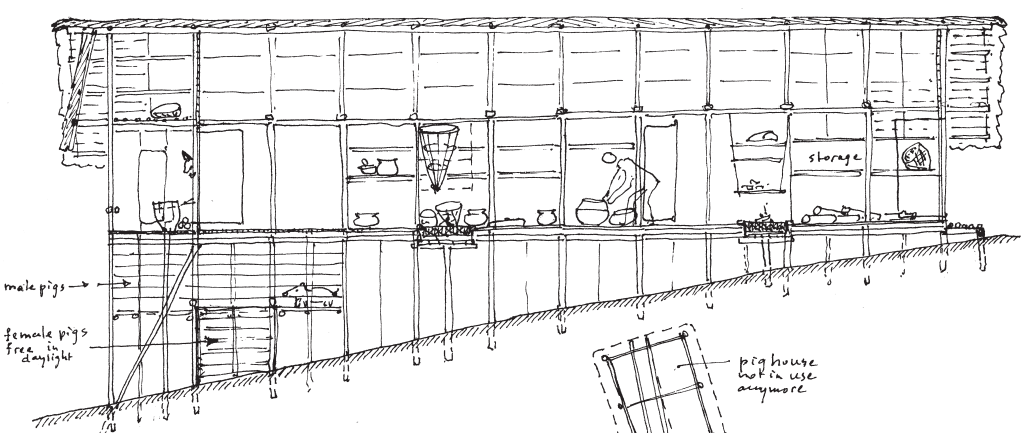
P. 111: Nyishi longhouse in D. 051, Taypa, 1999.

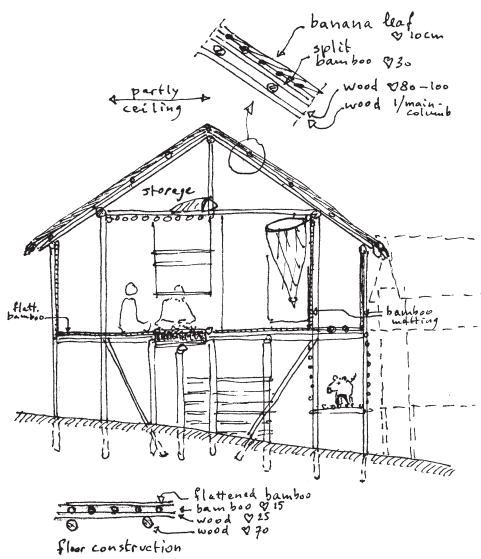
D. 051: Nyishi longhouse, Taypa, near Koloriang – plan, sections, granary view.

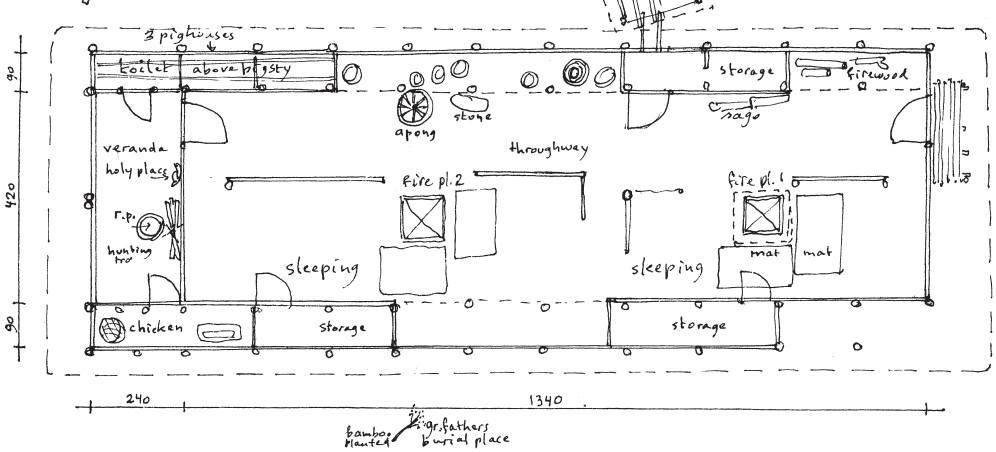




granari 1



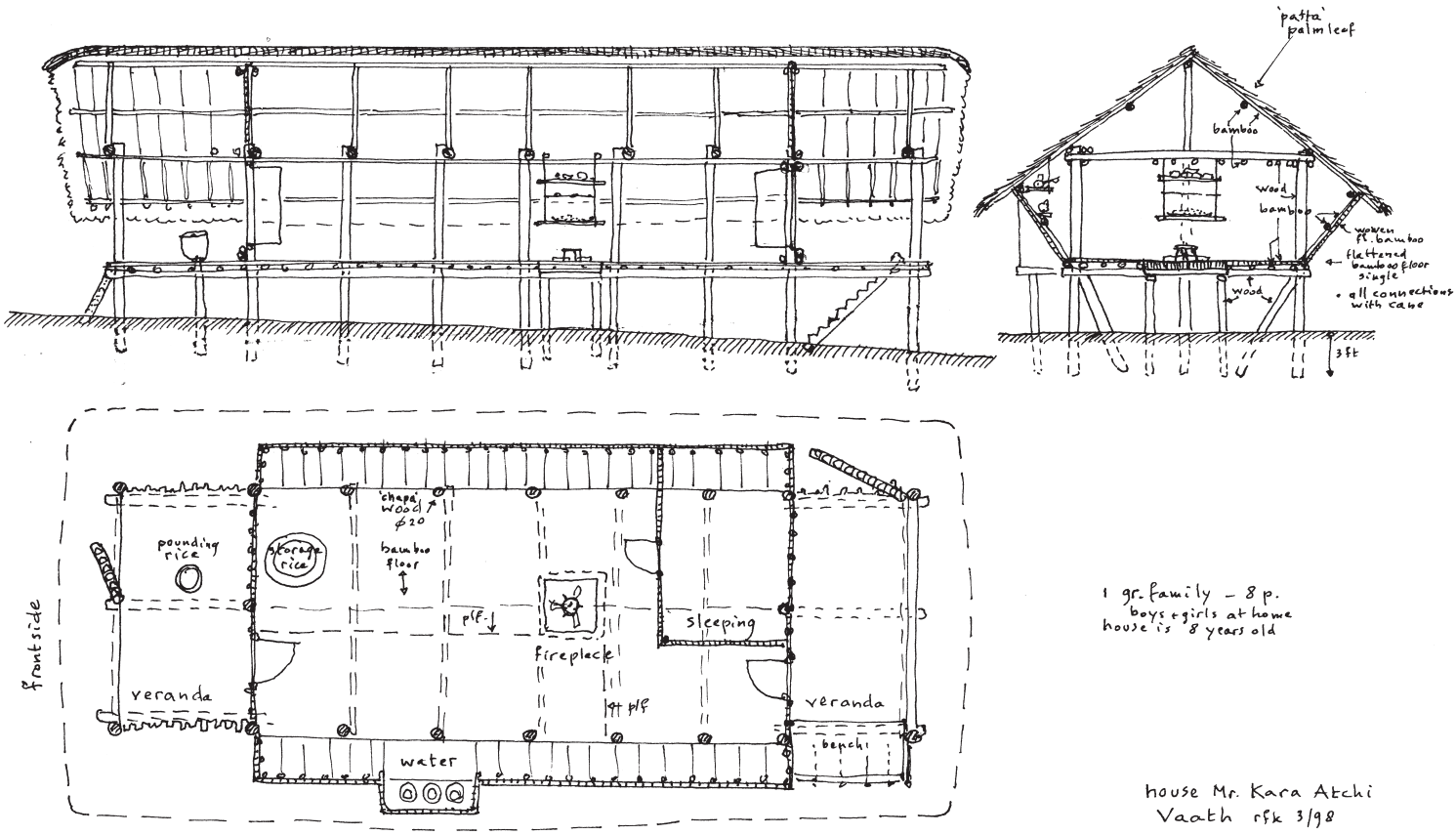




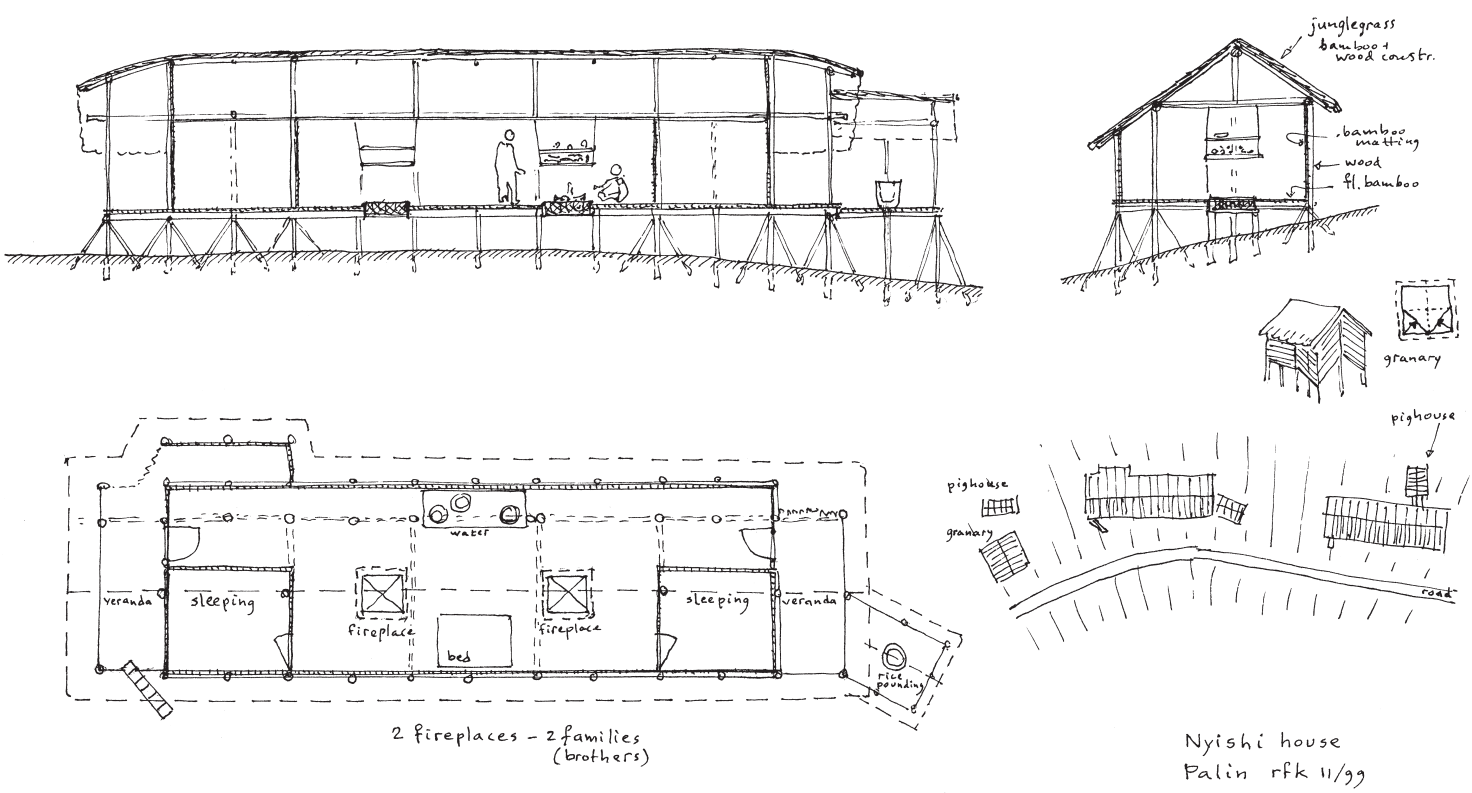
fireplace 1 – fam. 1 – 5 persons: 1 man, 2 wives, 2 ch.
fireplace 2 – fam. 2 – 4 persons: 1 man, 1 wife, 2 ch.
– fam. 3 – 6 persons: 1 man, 2 wives, 3 ch.
total 3 families – 15 persons
fam. 1: no pigs; pigsties belong to fam. 2+3
2 granaries

house 4 years old

Nyishi longhouse
Taypa rfk 11/99



D. 052: Nyishi house, Vaath – plan and sections.



D. 053: Nyishi house, Palin – plan and sections.

P. 112: Nyishi man wears hat with a hornbill beak on top, Vaath, 1998.

APATANI

Overview

Apatanis build their small houses very close to each other, in rows, along 'village streets', with the granaries at some distance. The houses stand on platforms, with front and back terraces accessible by steps or logs with notches. The front terrace is the more public space, and the back terrace the more private as it faces the back yard or garden.

The house interior is a single, rectangular room, usually with two fireplaces. Many houses also have a separate room near the entrance for rice pounding and keeping chickens at night. Running along one long side is a narrow space used as a toilet and to feed pigs living under the house. The basic construction materials are wood for the main construction and bamboo for the supplementary construction. The roof, once thatched with grass, has shifted to split bamboo and (increasingly) corrugated metal. Apatani villages have a number of ritual platforms (*lapang*), one for each clan or clan cluster in the village.

Commentary

It is 1998. In Hapoli, one of the two modern 'towns in the Apatani Valley,' we met a kind and hospitable Apatani man, Mr Tajo. He took us to his bamboo house and explained, 'This is the house of my first wife. I have two wives and for each of them a house. The house of my second wife is somewhere else in town.'

The next morning we were invited for breakfast with Mr Tajo's sister and her husband, who lived in a modern house. We talked on the terrace of the upper floor, overlooking a garden with fruit trees in full blossom, and then went down to have breakfast. One part of the house, as we saw later, was built in the traditional way, complete with open fireplace and bamboo floor, walls and ceiling. 'That's to satisfy the gods,' we were told. 'An Apatani has to live in such a house, and so we do.'

We visited Hong (or Hang) village, the largest of the seven original villages in the valley, with about 1000 houses built close together. 'That's to save land for farming,' we were told. 'But above all for security. Till a few decades ago we had attacks from our neighbours, Nyishis and Hill Miris.' Rice fields were laid out on the lowest, most fertile part of the valley (P. 113 and P. 114), villages and bamboo plantations on the higher parts, and pine trees were planted on the slopes of the surrounding mountains.

In the daylight we got a better impression of Hong village. The space between the houses, lined up in a row, was just enough to let rainwater drip from the roofs. We also heard that houses, now mostly about 1 or 1.5 metres off the ground, used to be raised 2.0 or 3.0 metres.

In the Bullo clan quarter of Hong village we met Mr Bullo Tate, who showed us his house (D. 056, D. 057 and P. 118). Pigs lived underneath, though he explained that pigs were sometimes allowed in the backyard, which was the domain of the chickens. We went inside. Running next to the long central space was a separate narrow space with on the floor only a few bamboo lengths with wide gaps in between. This was the toilet. I looked down and saw the pigs look up to me through the floor with demanding eyes, waiting for what would fall down.

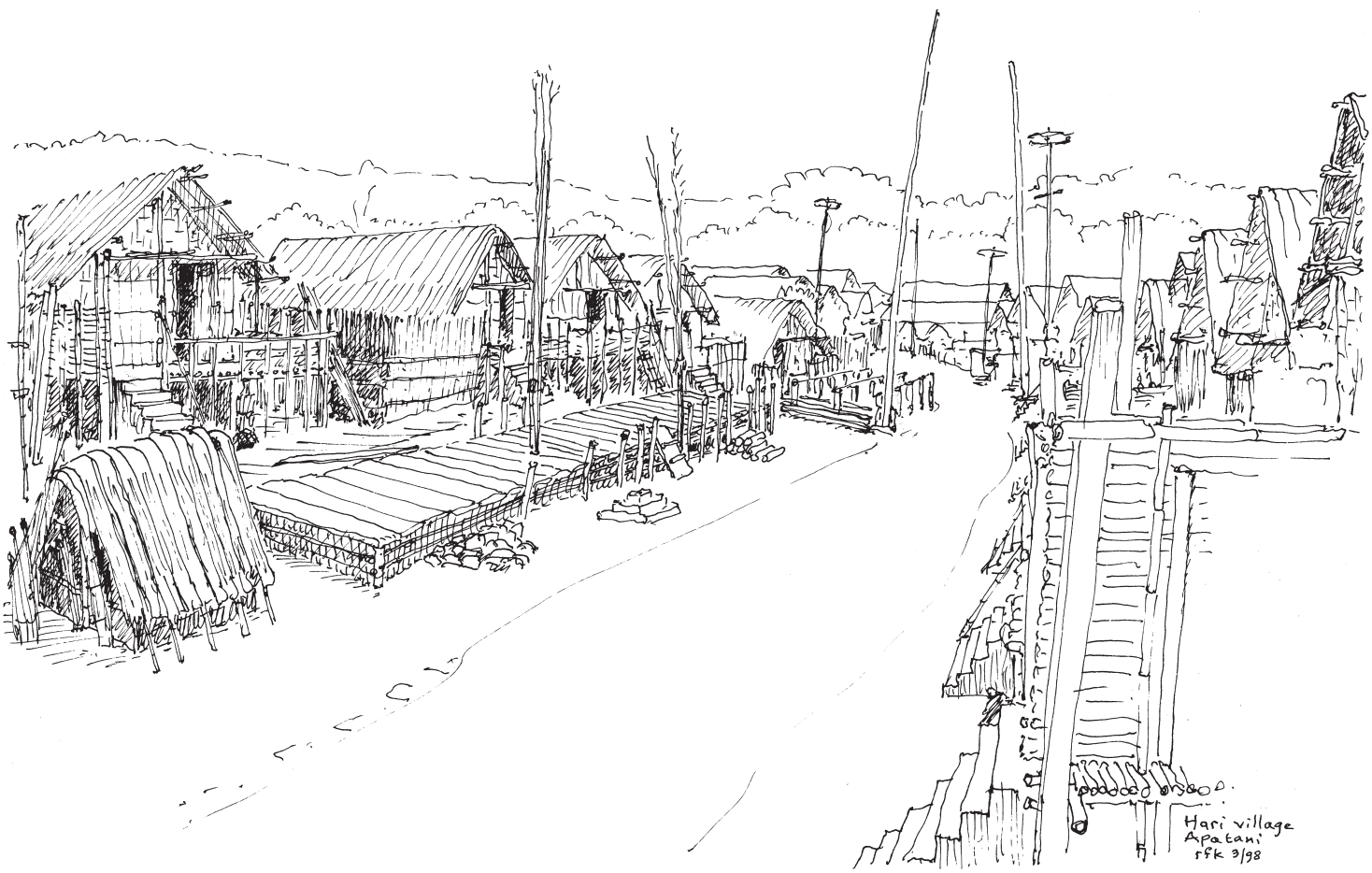
We also saw one of the *babo* poles, or high masts with a double cross-beams at the top, which stand next to the ritual platforms (*lapang*) (D. 055, D. 056, P. 115, P. 116 and P. 117) and in front of houses as a symbol for each boy born in the family. The tall poles played a role in the Myoko festival, which was going on but had nearly finished (P. 124).

Mr Bullo Tate took me into his backyard and across a fence to a sloping garden that led to a bamboo plantation. Against a shed cut bamboos were standing ready for renewing a part of the roof. Looking around the bamboo plantation, where all bamboos had a diameter of about four to five centimetres, Mr Bullo Tate told me, 'Only a special kind is usable, the kind where the stalk gets yellow spots. Then it can be cut down. Another kind that stays green is worthless and is not used.'

In Duta village, we visited Mr Tajo's sister, who luckily was at home. The house (D. 058) was almost identical to Mr Bullo Tate's house, except that everything was in reverse: the passage along the fireplaces and the doors were here at the right side. We asked

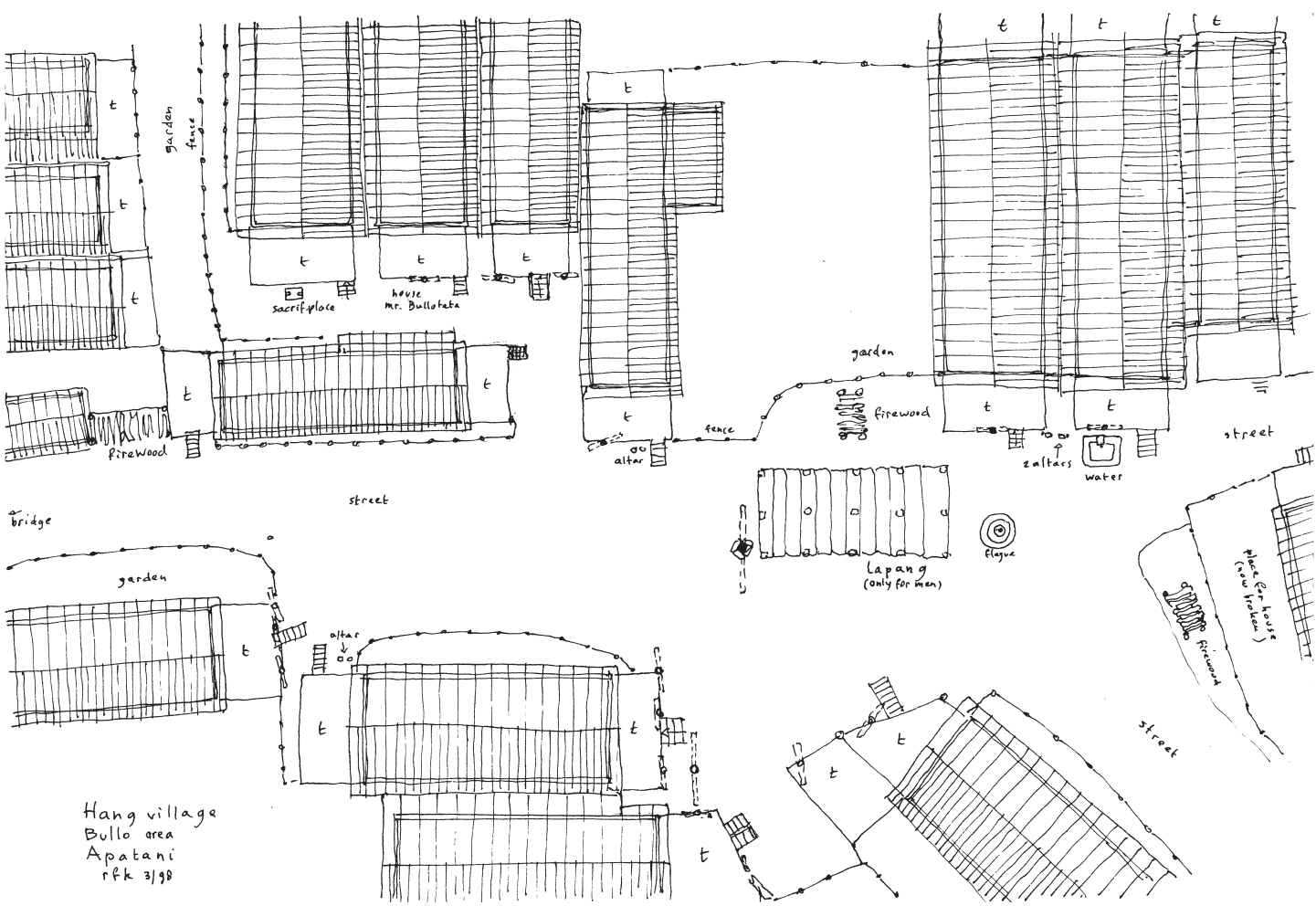
P. 113: Apatani valley, paddy fields, 1998.

P. 114: Apatani priest, sacrificing for a good harvest, 1998.



D. 054: Apatani village street, Hari – view.

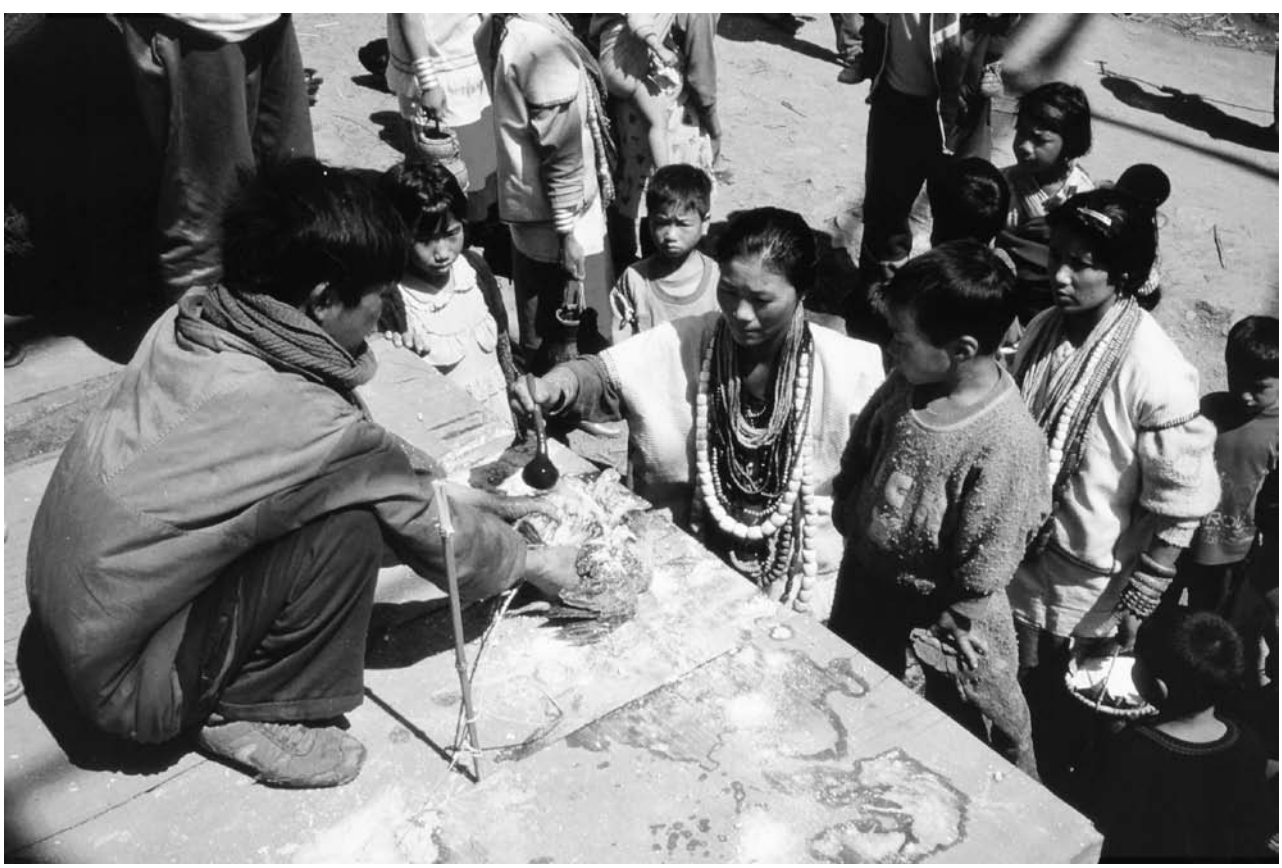
D. 055: Apatani, Bullo quarter, Hong – view.



D. 056: Apatani, Bullo quarter, village street and ritual platform (*lapang*), Hong – plan.

P. 115: Apatani village street with high poles (*babos*), Hong, 1998.

P. 116: Apatani priests performing a sacrifice on a ritual platform (*lapang*), Myoko festival, Hong, 1998.



P. 117: Apatani sacrifice on *lapang*, Myoko festival, Hong, 1998.

about this while standing in the street, and an old man answered, 'Some people make the door and passage at the left side, others at the right side. It doesn't matter.'

The ritual platform nearby was unusually large with wooden planks about 90 centimetres wide and 10 to 12 centimetres thick. They were cut by hand with a 'dao,' and we saw the cuts in the wood: professionally done.

Next day Mr Tajo took us on a walk up into the surrounding mountains. We started along a footpath, which soon changed into a set of steps. At one of the nearby houses Mr Tajo picked up a 'dao.' 'It could be handy on the way,' he said. Beyond the last houses the footpath went steeply upwards, first through a pine tree forest, later through mixed forest. Some pine trees were very old and had a diameter of 1 to 1.5 metres; they were evidently used for the enormous planks for the ritual platforms.

The path reached the top of the first rise. From the protruding smooth rock we were offered a wide view over the Apatani Valley: rice-fields defined by small dikes in a fascinating pattern (P. 113), the various villages, bamboo groves, the slopes with pine tree plantations and the wooded mountains, hundreds of metres above.

The footpath continued horizontally and then further upwards. After one more beautiful view over the valley we crossed a pass to the other side and descended slowly. 'But we've gone wrong,' Tajo said with a gesture. We had to go back upwards and then another footpath led steeply down into the narrow valley. 'In fact I have made this walk only once, as a boy and together with others,' our friend explained. 'But not since then.'

On another day, we walked down a winding sandy path through the fields to Hari village. Along the path a priest was sacrificing for a good harvest (P. 114).

The year before, most of Hari had burned down, but in three or four days it had been rebuilt. The new houses had metal roofs, as a precaution against a future fire. Walking by half-burnt black stumps of platform-poles and pieces of charcoal on the ground, we smelled the burning.

In a part of the Tasso clan quarter that had survived the fire (D. 054 and P. 125), we were taken by a nice lady named Aka to her friend's house. I sat on the front terrace and made a drawing of the area (D. 054, street image with *lapang*) and then one of the houses (D. 059). It was practically the same as those in Hong (Hang) and Duta, the only differences being a bit more distance to the houses next door, no backyard and the back terrace lying along an alley.

We returned a year later, in 1999. In Hong a new house was being built in the same spot as the old one, which was ten years old and had apparently worn out. The new house would be exactly the same, they said, with front and back terraces, and toilet room running alongside the living room. But the new house would get a metal roof, and the corrugated iron sheets lay ready.

A large group of 20 or 30 men was working on the house. Even grandma helped by bringing materials (P. 120). The owner took care of food and drinks for all those who built his house. The platform construction was nearly ready, and they were working at the top layer. Nearly all the split poles for the walls were in the ground already; pointed at the base, they were driven into the ground, the short ones with a big wooden hammer and the long ones by hand. The poles were fastened to horizontal rails with strips of cane.

They had started that morning and in two days the house would be ready, they told us. The men were not paid, but the owner would help them when their own houses were rebuilt.

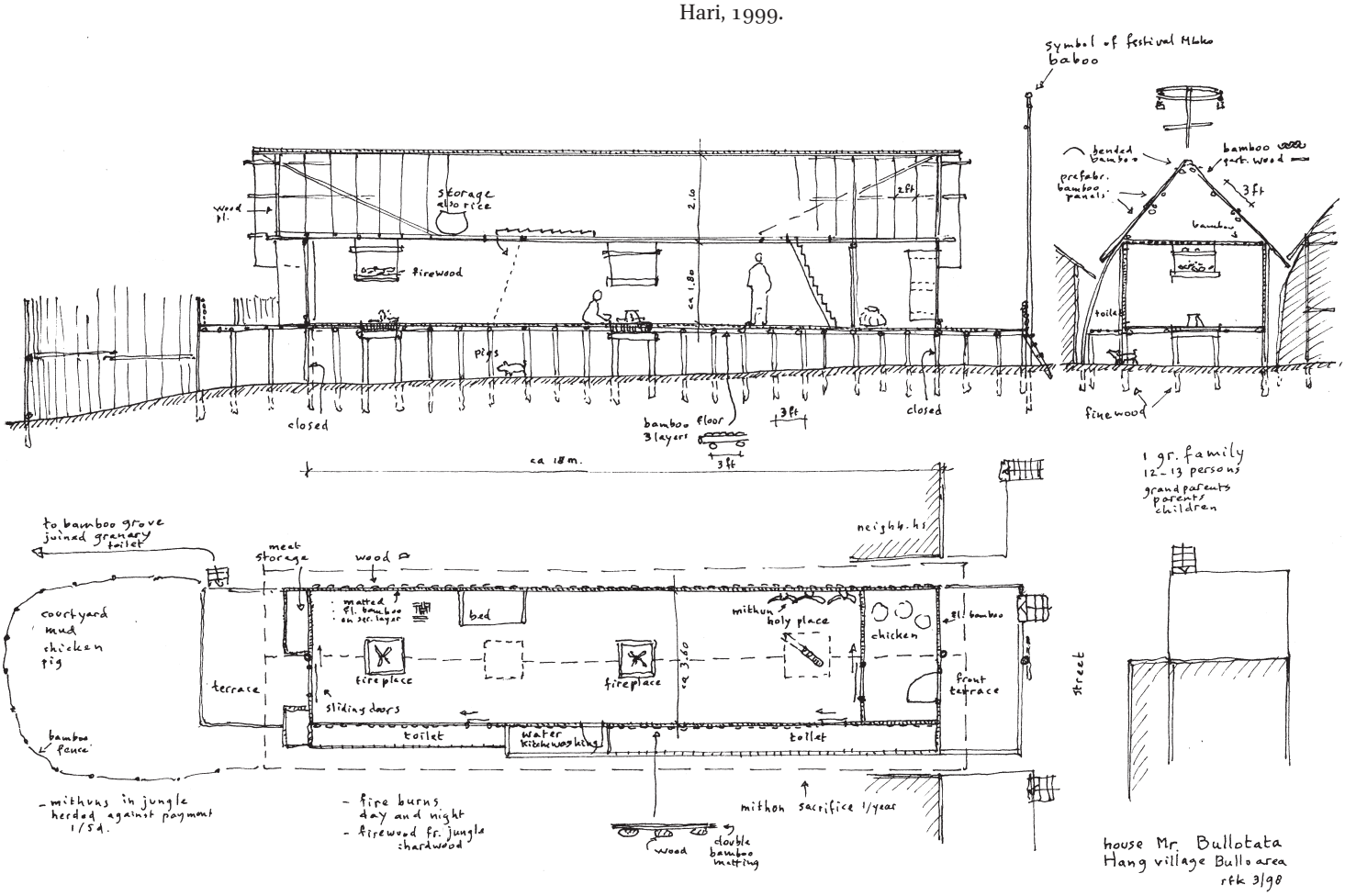
We came back four days later, after a trip to another region, and were curious to see how things stood with the new house. It had been finished the day before, and the whole process had taken four full days. It looked as if it had been standing there forever (P. 121 and P. 122). Only the still green colour of the bamboo revealed that the house was new, though some old parts of the old house had also been used. That evening the priest performed a ceremony to inaugurate the house.

Next we were taken to see the one and only concrete house in Hong village (P. 123) at the time. We had seen it the year before, in 1998, and some people had disparaged it. It had the traditional shape, with front and back terraces, and rectangular living room with fireplace; only the little front room with rice pounding mortar and chicken baskets was missing. At the back was a separate sleeping room, and the toilet was a little extension from the house, shorter and unlike the traditional corridor-like toilet. This toilet had a concrete floor with a raised squat-toilet. No pigs were kept under the house.

Walls of brickwork were built on a substructure of concrete (or plastered brick), and the roof was made of wood covered with corrugated iron sheets. The interior had wooden floor planks and a bamboo ceiling. In the central room a double concrete pit was inserted for a fireplace, and there was a water pipeline (which was cracked).

P. 118: Apatani house in D. 057, Hong, 1998.

P. 119: Apatani woman weaving on her front terrace, Hari, 1999.



D. 057: Apatani house, Hong – plan and sections.

P. 120: building a new Apatani house, grandma helps, Hong, 1999.

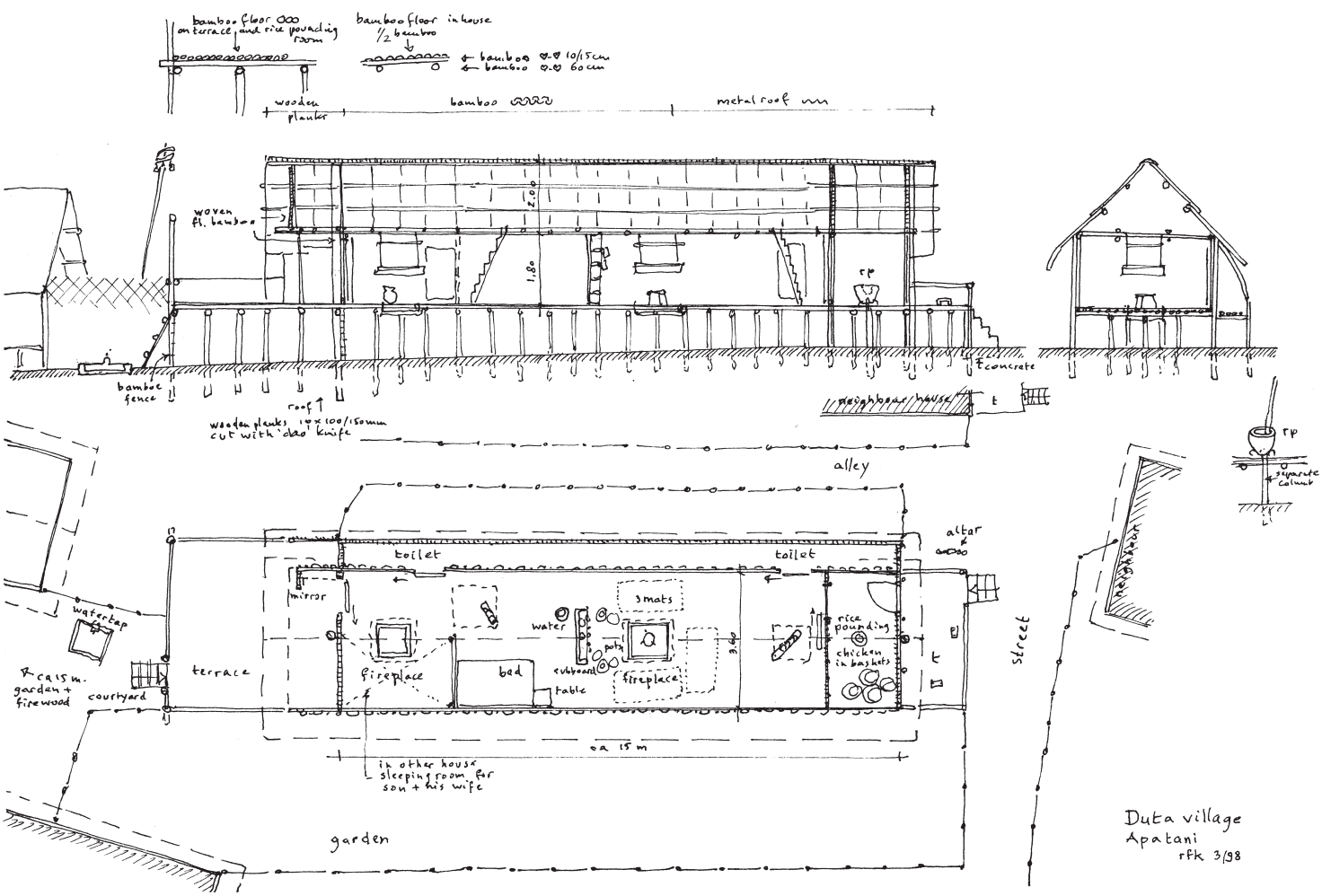
P. 121: the new Apatani house is ready, Hong, 1999.

P. 122: sitting around the fireplace in the new Apatani house, Hong, 1999.

A friend, Nampi, took us to her sister's house in Hari village. After drinking rice beer, I made a drawing of her house (D. 060) while she told us, 'My husband is a policeman in Changlang district, and seldom he comes home, the last time was three months ago.' The house was of the standard Apatani type, in building method and use of materials. Only the living room had some modern comforts like a TV on a board in the corner next to the ritual place with mithun skulls, a plastic water barrel near the first fireplace and finally a bed, table and standing cupboard near the second fireplace. Leaving the house, we spoke to the woman next door, sitting on her terrace and weaving (P. 119).

On our last day, we sat in a house in Hapoli, the administrative centre, with many modern houses. It was the house of a female teacher, Mrs Dumi, who told us that in former days a joint family had not been uncommon among Apatanis, but that it had become rare. Some houses still had three to four fireplaces, but only the first two were used. Then we talked about marriage. Marriage by negotiation still happened sometimes, whereas it had been the norm before. Another woman, Reno, explained, 'These days Apatani boys and girls usually choose each other, to be marriage partners.' And another, younger woman, Anja, added, 'I am not married yet because I don't like Apatani men. They are lazy.'

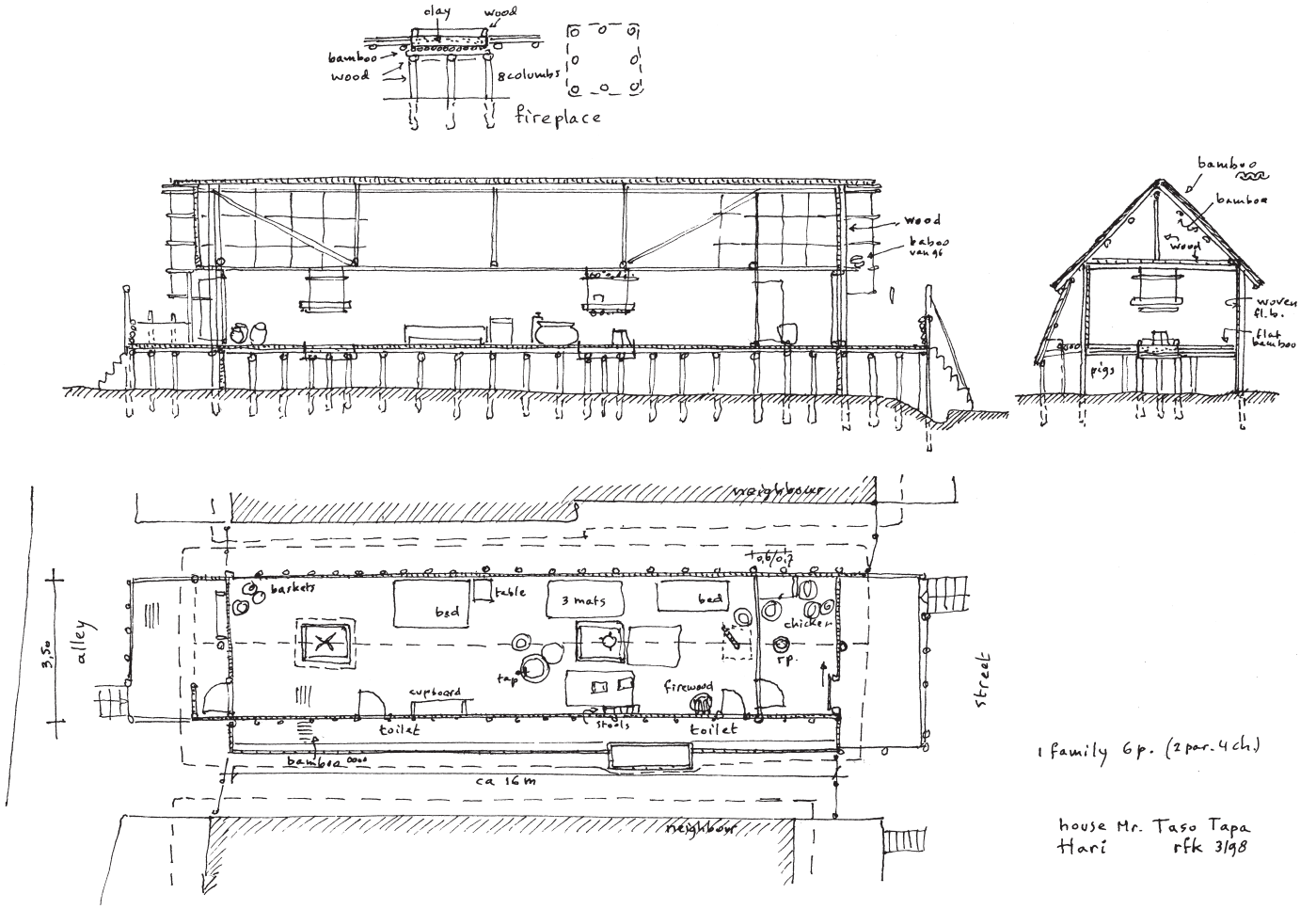
P. 123: the only concrete house in Hong, 1999.



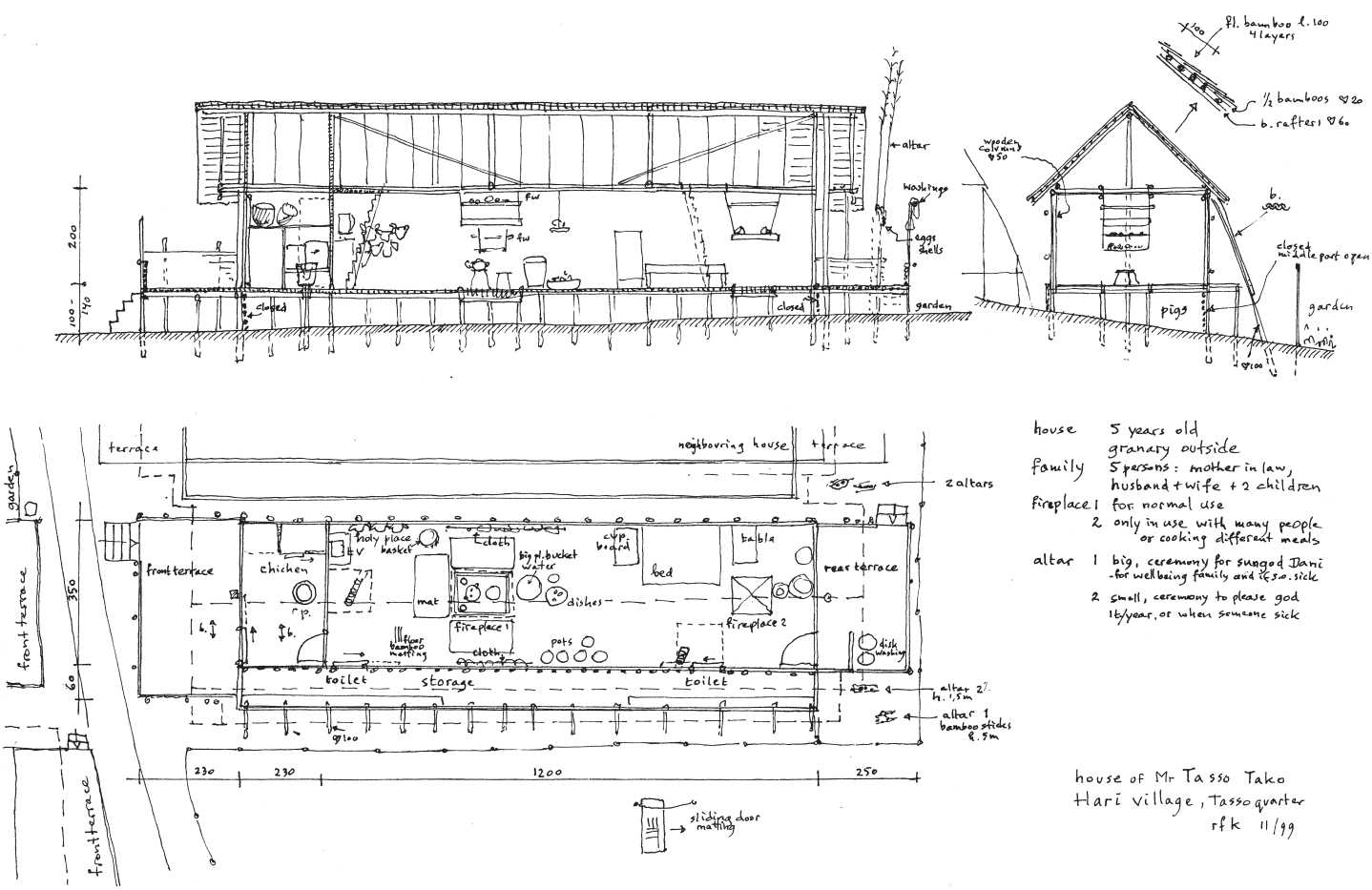
D. 058: Apatani house, Duta – plan, sections and details.

P. 124: playing on the Apatani ritual poles (*babos*) during Myoko festival, Hong, 1998.

P. 125: part of Apatani village of Hari that survived the fire, 1998.



D. 059: Apatani house, Hari – plan, sections and detail.



D. 060: Apatani house, Hari – plan, sections and detail.

HILL MIRI

Overview

Hill Miris houses are often situated at some distance from each other on a hill top or slope, with granaries far from the houses. The house, built on a platform with posts, usually consists of one large room (with two or three fireplaces), a wide front veranda with bench and entry stairs, a back veranda with connection bridge to a separate pigsty, and two narrow side verandas. The construction is wood and bamboo, with bamboo walls and floor and a thatched roof with palm leaves. Cane is used for the joins.

Commentary

Raga is a large village/small town, the government administrative centre of the region with half modern and half traditional Hill Miri houses. Here Mrs Godak Yajir welcomed us to her modern house and served us tea. Then she showed us her other house with a traditional interior and a sacrificial altar for pigs. She pointed out a fourth altar for chickens, near the veranda of the first house. The traditional room also had a ritual place, while mithun horns and a skull lay in the rack above the fireplace. 'These,' she said, 'will be transferred to the ritual space as soon as they are dried out by smoke.'

As with modern Apatani houses, Hill Miris could live in a modern way, but to please the spirits you needed to have at least one traditional room with fireplace, bamboo ceiling and woven bamboo walls.

After showing her my drawings, she understood what I was after and said she'd take us to some traditional villages. The next day, travelling with Mrs Godak Yajir, the road took us through a beautiful mountainous landscape with pine tree forests. We passed several villages and then in front of us saw a high mountain and on its slope the village of Degodak. Another village, Segodak, was closer but lower and hidden behind the massif. The narrow road wound through valleys and over a pass and then into Segodak.

Degodak and Segodak formed a kind of twin village, where Mrs Godak Yajir was born. She spoke about her ancestral house. 'We lived there with 70 people and we had five fireplaces. Now those times are over. Someone finds a job with the government and leaves; another becomes a driver and leaves also, while a third man builds a house for himself.'

Passing by a tree-fern growing by the roadside, she explained that in the Hill Miri language it is called *tati* and was used to cure illness. 'The ill person is better after one week,' she said.

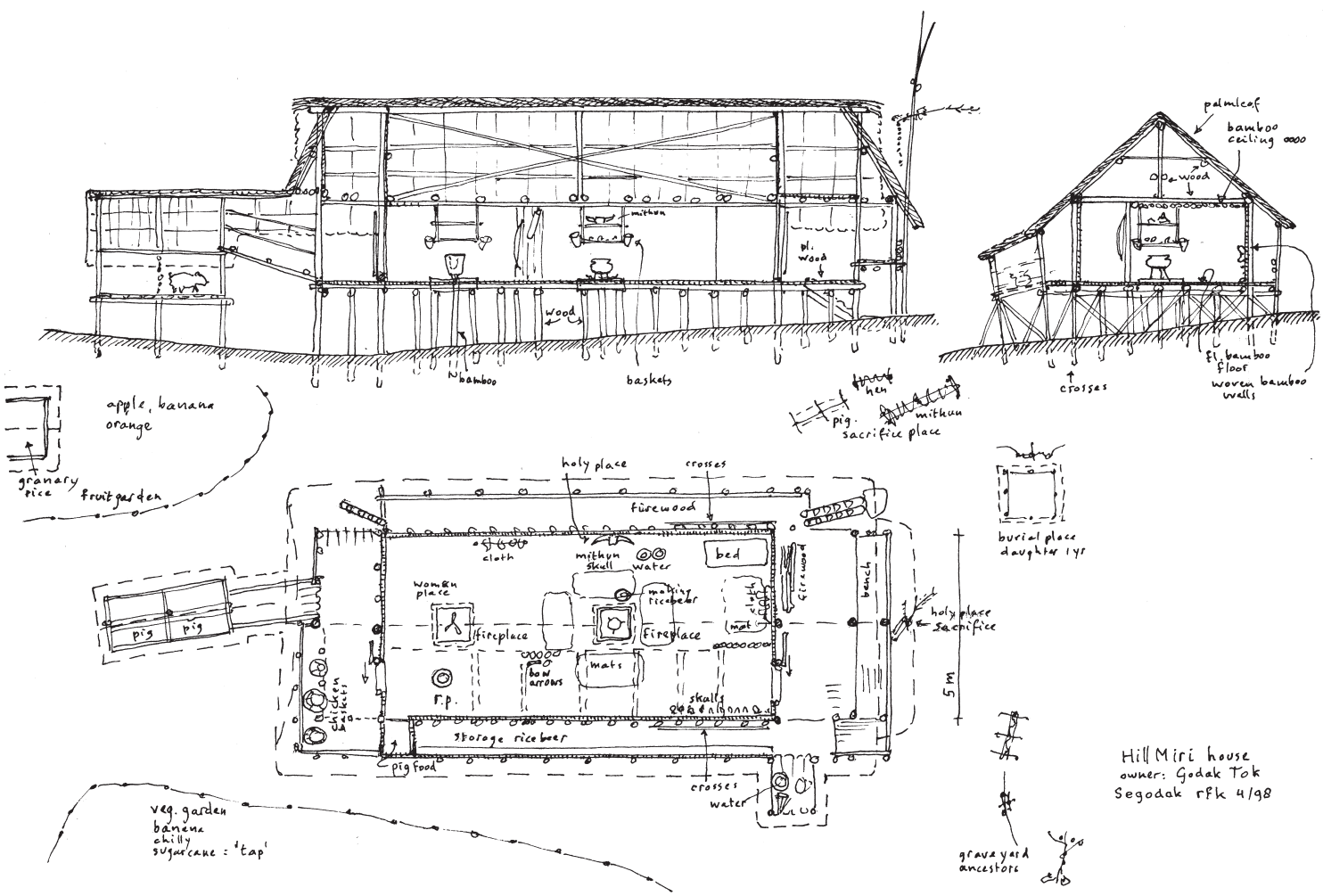
Arriving at Degodak, it struck me again that the granaries stood far from the village. Along the road men were busy building an Inspection Bungalow. The large house we had come to see is a bit higher on the slope. Reaching the house, we found that we couldn't visit because a ritual was being performed to cure illness; in such cases strangers are not allowed to enter. From the veranda we were told, 'After tomorrow, when the puja is over, you are welcome.'

We went on to Segodak village, where the houses stood transverse to the slope. Mrs Godak Yajir took us to one of them and introduced us to the family, who after a hospitable welcome showed us their house, owned by Mr Godak Tok (D. 061, P. 126, P. 127 and P. 128). Built on a platform, it had one oblong large living room surrounded by verandas. A separate pigsty was connected to the back veranda. A staircase of two tree-trunks with notched steps stood at the corner of the front veranda which also served as an extension of the living room.

A wide bench under the eaves along the whole front offered a fantastic place to sit, both inside and outside, protected against rain and sun and at the same time with a nice view of the surroundings. The front veranda led to the central living room, while both side verandas served as storage areas for rice-beer and firewood. And there was a small extended veranda for water and washing.

The two fireplaces were on the central axis of the living room, while the passage from the front to back door lay left of this central axis. The central fireplace was for normal use, the other in the rear was for women in their menstruation period. During their period women were considered impure and had to stay around the second fireplace. Against the left wall near the front door hung skulls of hunted boars, deer, etc. Against the opposite wall next to the central fireplace was the ritual place where mithun skulls hung.

P. 126: Hill Miri house in D. 061, Segodak, 1998.



D. 061: Hill Miri house, Segodak – plan and sections.

P. 127: the house-owner and his wife, Segodak, 1998.

Next to the second fireplace was the place for pounding rice, with a big mortar that didn't rest on the floor but was supported by a pole that went beneath and into the ground, in order to prevent the floor from shaking. The chaff was stored in a compartment near the back door. On the back veranda were the baskets for keeping chickens at night and also a bridge to the pigsty, which was used as a toilet.

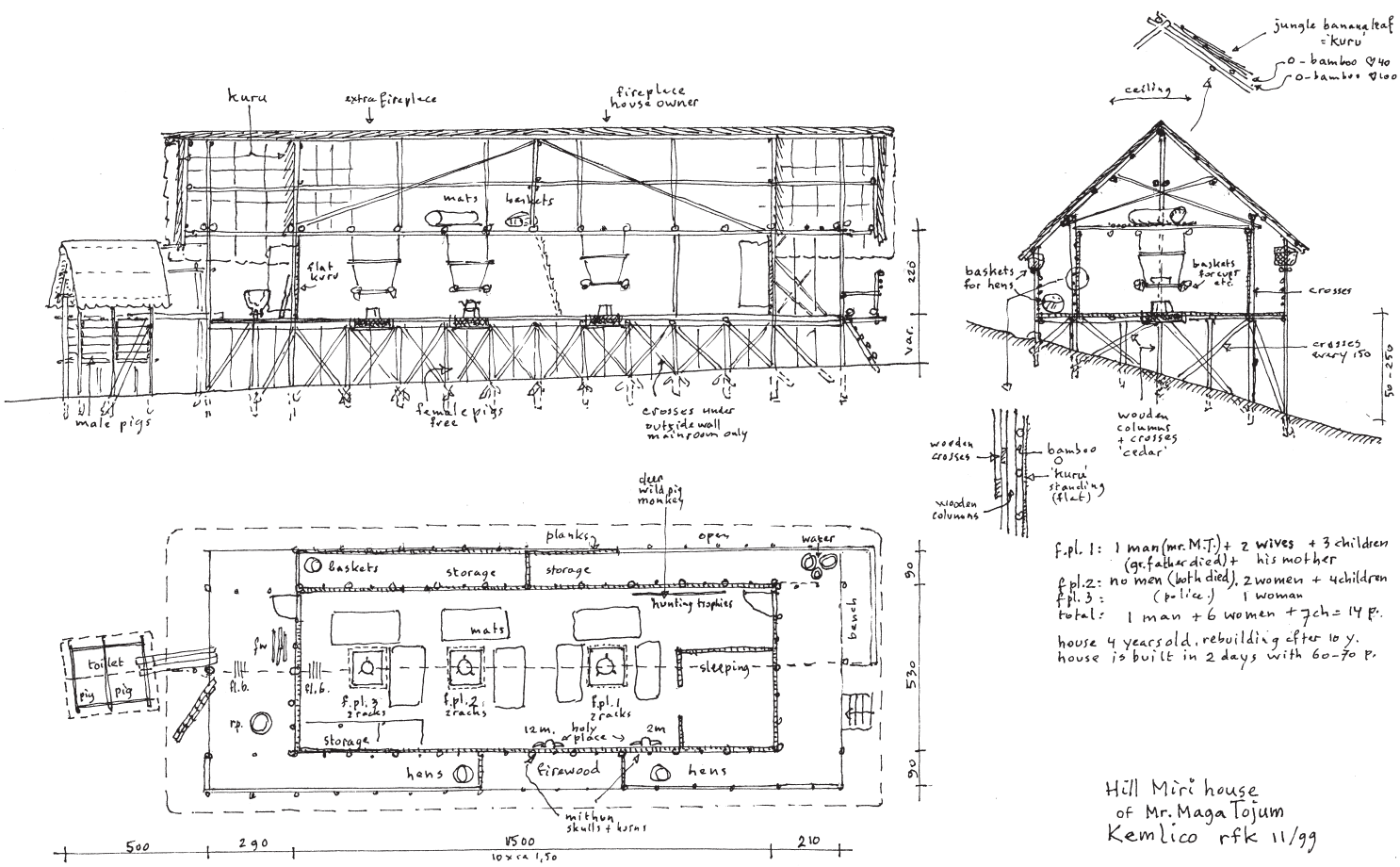
Down the slope from the house stood a ritual structure of bamboo and leaves, for sacrificing pigs and chickens. Several other bamboo structures at some distance in front of the house were monuments in memory of ancestors and a deceased one-year-old daughter. Small mosquitos stabbed me while making my drawing, especially on the front veranda and at the back near the pigs.

Mr Bijoy, who wanted eagerly to be our guide, took us to the village of Raker behind the mountain. We walked up, down, over and around this mountain, through the jungle and arrived in the village. It was hot.

Raker consisted only of a few houses around an open sandy space. One of the houses was a bit larger and had three fireplaces (D. 063 and P. 131). Only the kids were at home, while the men and women were working on the fields. We sat on the wide bench at

P. 128: fireplace, Hill Miri house in D. 061, Segodak, 1998.

P. 129: Hill Miri house in D. 062, Kemlico, 1999.



D. 062: Hill Miri house, Kemlico – plan, sections and details.

P. 130: fireplace in Hill Miri house in D. 062, Kemlico, 1999.

the front veranda, hoping somebody would come home. The spot was wonderful: in the fresh wind, in the shadow of the thatched roof, with a beautiful view over the Kamla River valley. On the slope below, we saw the people of Raker working in the fields, lined up next to each other.

The occupants of this house were a joint family, two brothers and their families, a total of more than 20 persons. Of the three fireplaces, the first was for the older brother, the second for the younger brother and the third for women in their menstruation period. Near the first fireplace was the ritual place. The third fire was burning and we saw a woman sitting next to it. Nearby was the place for pounding rice and the door to the back veranda, with the chicken baskets and bridge to the pigsty, which here had six compartments. The veranda along the left side was divided and served as place for washing and chickens, while the divided right veranda was for sleeping and chicken.

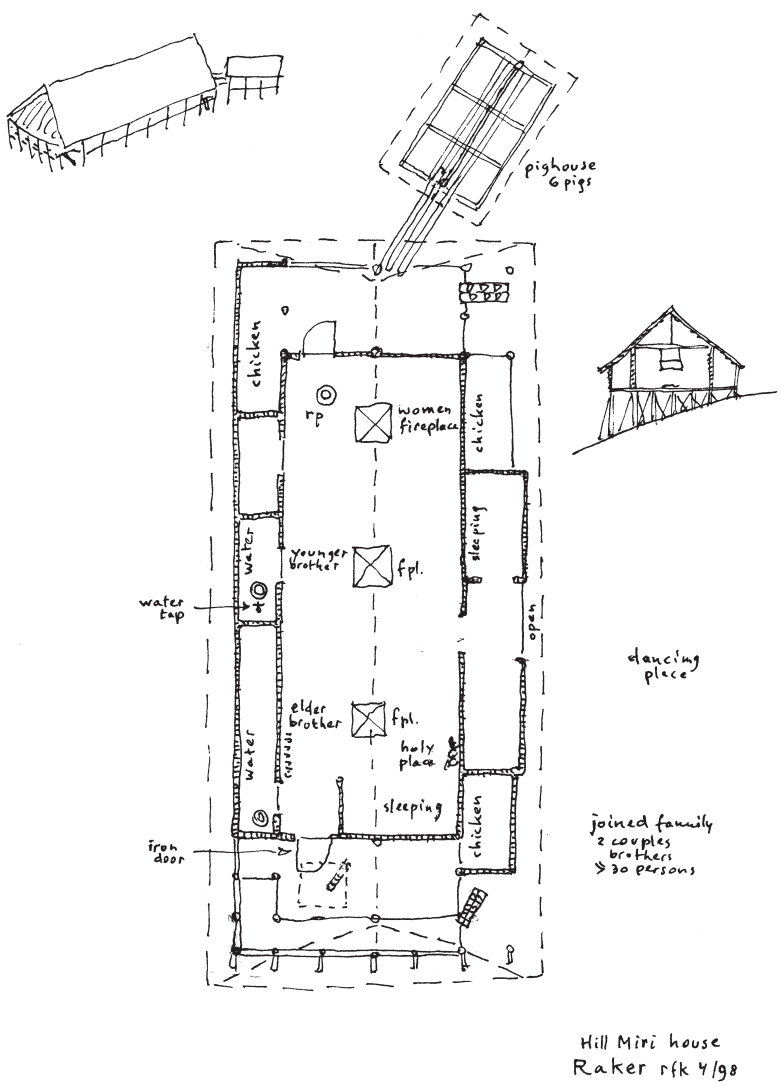
Mr Bijoy said, 'Hill Miri men can marry more than one or two women; an uncle of mine had 17 wives. He was the king of the Hill Miris.'

Back in Raga, we looked at a house which was somewhat different. The shape was a variant of the common type because the left veranda was missing and the right one was doubled in width, while a part of front veranda served as a bedroom. The living room had two fireplaces, and the back veranda had a terrace extending beyond the eaves. Behind the vegetable garden were a separate pigsty and a key-shaped pond where two ducks swum. Altogether a creative variant (D .064 and P. 132).

The final Hill Miri village we visited was Kemlico, a beautiful settlement built on a slope. A boy we talked with appeared to speak English and was willing to be our guide. Near a house on a hilltop was a monument for the recently deceased headman. A high tower-like structure of wood and bamboo was crowned with a kind of crow-nest and on top his black umbrella. Everything was ornamented with ribbons and cuttings of bamboo – an impressive edifice.

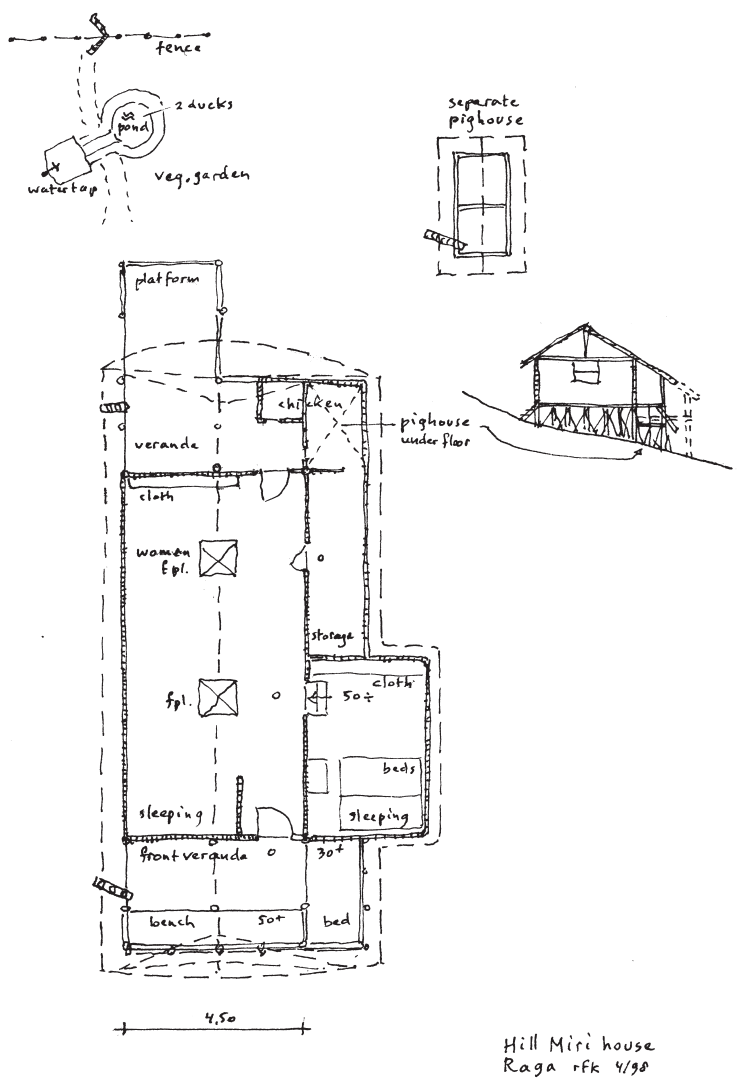
The boy took us to a house with several fireplaces, where he knew the owner (D. 062, P. 129 and P. 130). It was built on a raised platform and across the slope. The owner, Mr Maga Tojum, welcomed us. Up a staircase and through a veranda with a wide bench, we entered the large living room which had three fireplaces. We were invited to sit around the first fireplace and were offered millet beer and pieces of chicken cooked in bamboo.

P. 131: Hill Miri house in D. 063, Raker, 1998.



D. 063: Hill Miri house, Raker – plan, section and view.

P. 132: Hill Miri house in D. 064, Raga, 1998.



D. 064: Hill Miri house, Raga – plan and section.

The house was about twenty metres long and more than 7 metres wide. In the main it had the shape of the common Hill Miri house. Key differences were the separated bedroom in the front and the division of the side verandas. The first fireplace was for the owner with his two wives, his three children and his mother; his father was dead. The second fireplace belonged to two women, whose husbands were also dead, and their four children. The third fireplace was for a woman, who was not at home and worked with the police. The ritual place with mithun skulls was against the wall between the first and second fireplace. The place for pounding rice was at the back veranda, with the mortar in its own foundation, independent of the floor (as in Segodak). A granary for everyone stood near the house, as did sacrificial altars for mithuns, goats and pigs.

Mr Tojum said, 'The house was built in two days together with some 60 to 70 persons, and the roof is covered with leaves of the wild banana tree.'

Next day in the early morning I looked over the landscape and saw smoke and flames rising over the far slope. This was a sign that the people used *jhum* or slash-and-burn agriculture, something you saw everywhere. Yesterday it had looked as if things were getting out of hand, with flames of more than five, maybe even ten, metres high. But half an hour later it had all been controlled.

TAGIN

Overview

Traditional Tagin villages are mostly situated on hill slopes. Houses are built on raised platforms on high poles. The partition consists of a large central room with a fireplace and a veranda along all sides. One half of the veranda is for sitting with benches under the roof edge, rice pounding and water storage, and the other half is for keeping chickens, the pigsty and toilet. The entry is at the side where the platform is close to the ground. Houses for extended families have two central rooms each with one or two fireplaces. The materials used are wood, bamboo and thatch for the roofs.

Commentary

Entering Sippi village, we met a boy who spoke a little English. When we asked him if he would be our guide, he said, 'I have no time. I'm waiting for the bus.' So we walked around and saw that the village was built on level ground and that, at first sight, these Tagin houses looked similar to Galo houses: square-built with wide side verandas. Typical also were the pigsties under the roof edge, on the veranda but on a lower level.

People gathered around us and I tried to explain, in English, that I would like to see a house from the inside, but it didn't work; nobody understood me. Then, looking at the group of houses in front of us, I took out my sketchbook and started to draw (D. 065). The children became very curious and nearly climbed on me to look at my paper. Then older men approached, though one looked distrustful. To show what I was doing I raised my sketchbook, but that didn't make any difference.

One of the older men pointed at my reading-glasses, but I tried to make it clear that I need them myself. After that he touched my hair and then Edith's hair. To show him I didn't mind, I pulled his hair, which was short and bristly, and everybody laughed.

We left Sippi and went to another village about 16 kilometres to the north. This was known as Mara village (the Mara or Mra are one of several groups subsumed under the administrative label of 'Tagin'), a beautiful place lying on a high slope (P. 133). We found a boy who knew some Hindi, so Sushil could translate what he said, and he guided us.

Climbing up the steep slope to a house on high poles (D. 066, P. 134 and P. 135), he said, 'This is the most traditional house, but it has only one fireplace. In former days, houses had more fireplaces, but now the sons build often their own houses.'

Mr Ringgin Mara and his wife, an old couple without children, lived here and both were at home. At the slope side near the left corner, tree-trunk stairs led up to the platform. The husband welcomed us and was willing to show us his house. A veranda went all around the house, but narrowed and widened in different places. At the back, the veranda was wide and had a wide bench from where we had a marvellous view over the valley. On the veranda where we entered was the place for rice pounding, with a mortar that did not rest on the floor but was supported by only one pole that went beneath and into the ground, in order to prevent the floor from shaking. A woman neighbour demonstrated the pounding.

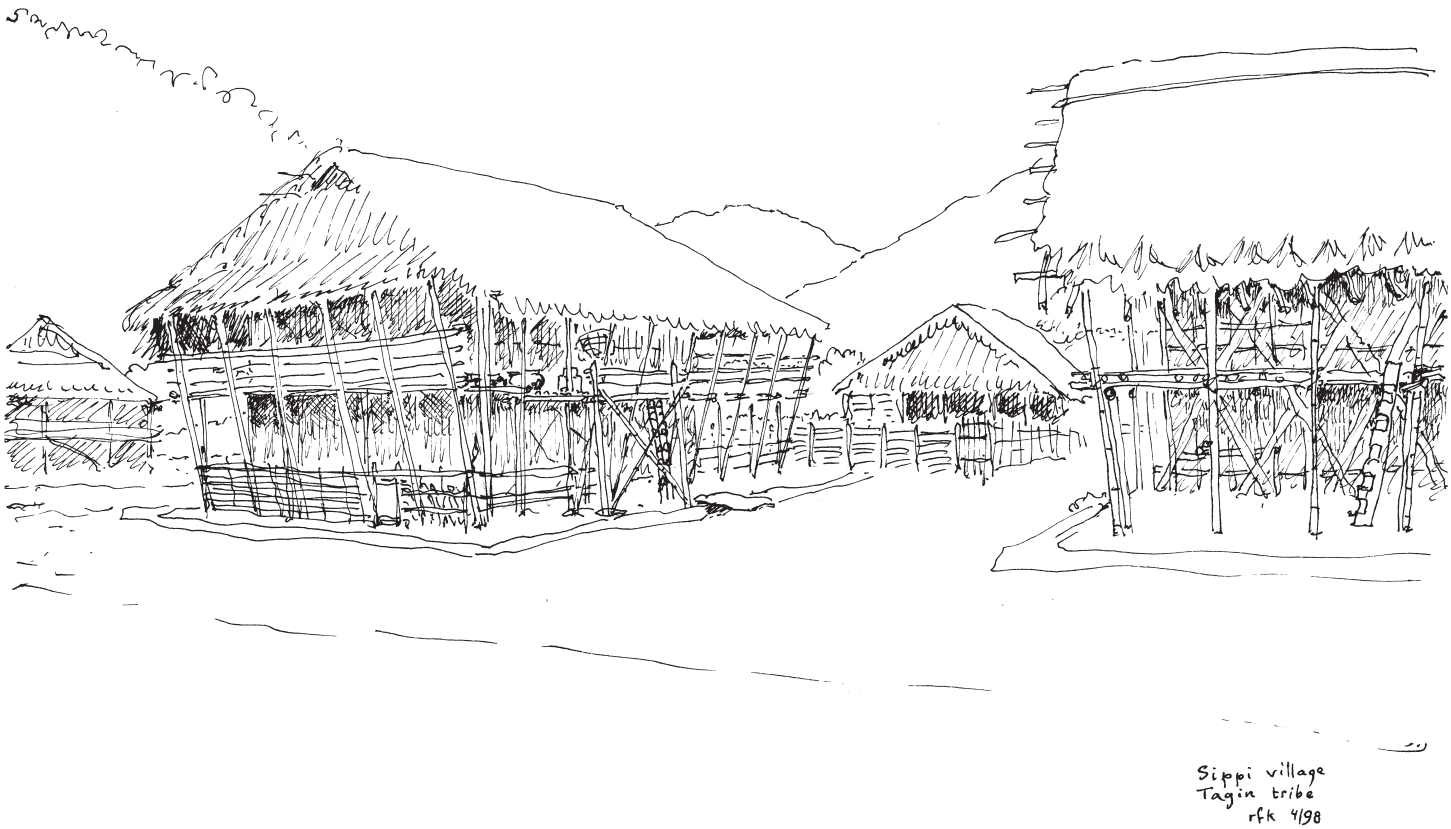
The central room contained the only fireplace (P. 136); in one corner was the ritual place and another was used for beer-ripening and storage. The construction of the house was very complicated. There were a great many columns, secured with crosses and shores, and some of them reached up into the roof-construction. The house was so solid and well-built that I had no doubt it could resist heavy storms and continuous rain.

The old man enjoyed watching me draw his house, and he liked to be photographed. His wife, on the other hand, was a bit shy (or maybe not interested) and stayed in the background.

The slope was very steep, so the platform at the entrance was a little less than one metre above ground, while at the other side it was fully five metres high. The male pigsty hung beneath the platform, about a metre lower. The female pigsty was on the ground among the apparent chaos of high poles under the house. Part of the veranda floor above the hanging male pigsty was also used as toilet.

The columns and the main construction were mostly wood, with only some bamboo. The floor

P. 133: Tagin houses, Mara, 1998.



D. 065: Tagin houses, Sippi – view.

cover of the main room was made of flattened bamboo, but at the veranda it was bamboo poles, so you had to be careful where you put your feet. The walls were partly made of wooden boards, partly of woven, flattened bamboo and banana leaves. The roof cover was a layering of fan-shaped palm leaves, in a beautiful structure that we could see from inside. It made the house waterproof—it rained the whole time we were there but not a drop leaked through.

In this dreary weather it got dark very soon. When we left, we gave a ride to a local man, Mr Tade Mara, who said he came to Mara to visit his parents. We asked who would help the childless old couple when they got too old for working in the fields. 'Then the village will look after them,' he said.

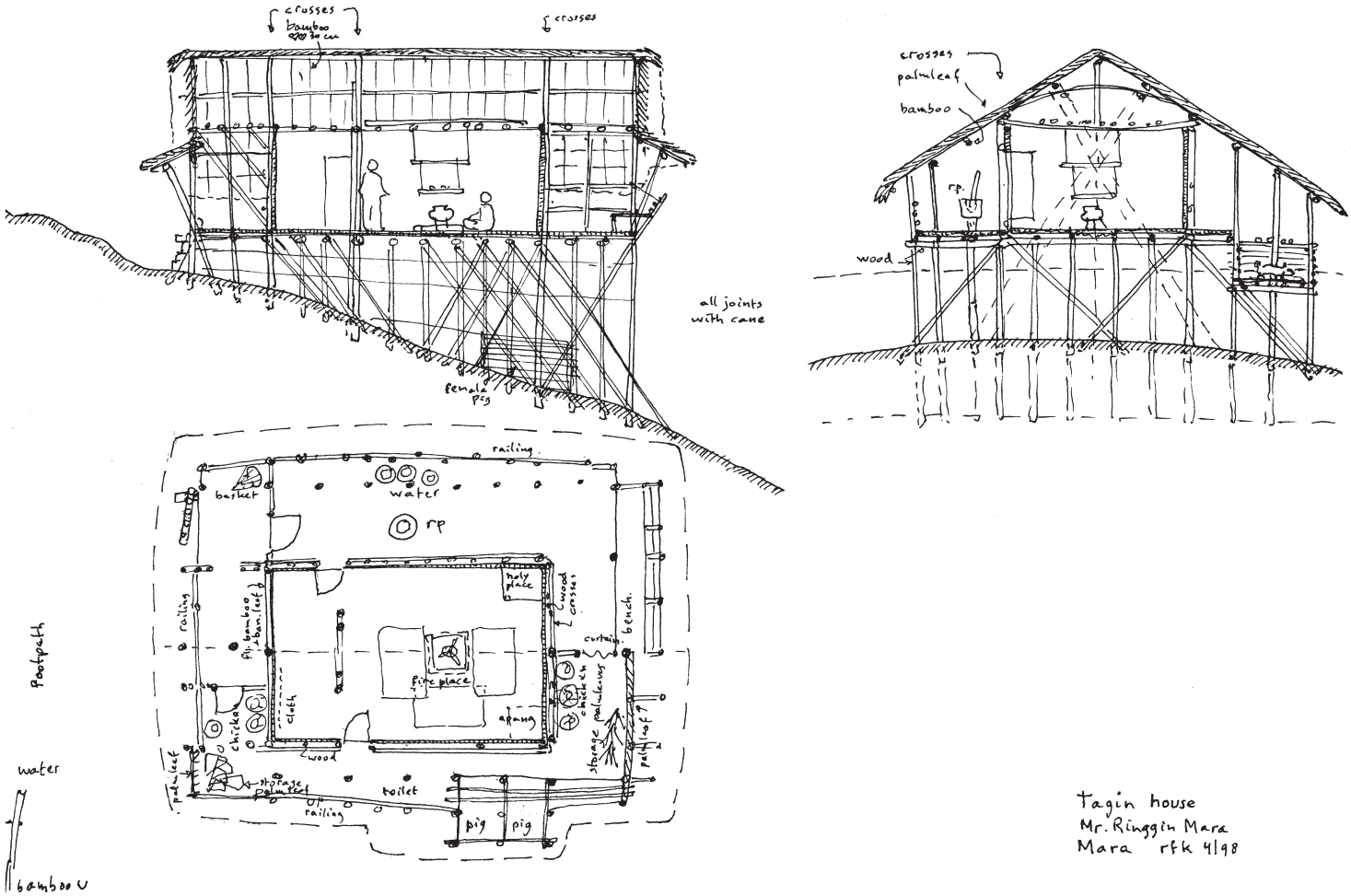
A year later 1999 we visited Mara village again. Guided by a boy who recognized us from last year, we went back to Mr Ringgin Mara's house. The old man was at home and his wife was working in the fields. The man recognized me. When I showed him the drawing and photo of his house, he said, 'I haven't received a photo.' I promised to send him the old ones and the new ones I would take. He went into the house and came back with a bow and arrow, a sword, and a Tagin hat on his head. He wanted to be photographed, so I took a photo (P. 137). Then he drew back his bowstring and shot an arrow, which stuck in the pole of a neighbouring house and trembled for a moment.

Our young guide said he knew a house with three fireplaces in his village of Poda Mara, high on the hill. At first we went by car, but the hairpin-turn road became too muddy and we had to climb on foot, up a much steeper and slippery path through bushes and fields.

After an hour we reached Poda Mara, located in a beautiful spot on the mountain slope, not far below the top. The houses looked interesting and at least one had three fireplaces. The house we visited was about 20 metres long and 10.5 wide (D. 067, P. 138, P. 139, P. 140 and P. 141). Up tree-trunk stairs, we climbed to the platform where we were welcomed and asked to sit on the wide benches of the veranda with wonderful views over the surrounding land and the distant landscape.

P. 134: Tagin house in D. 066, Mara, 1998.

P. 135: Tagin house in D. 066, Mara, 1998.

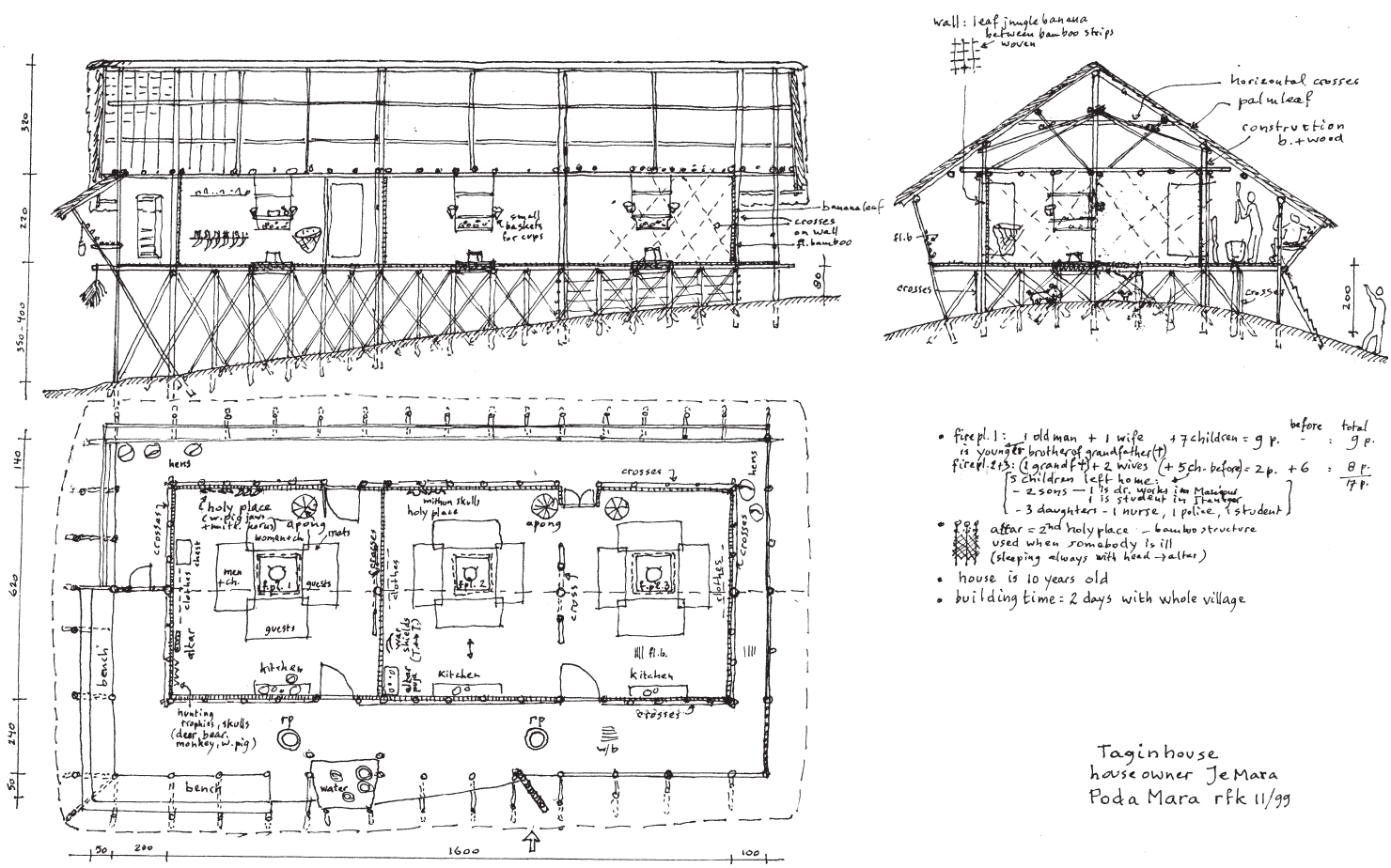


D. 066: Tagin house, Mara – plan and sections.

P. 136: man and his wife sitting near the fireplace, Tagin house, Mara, 1998.

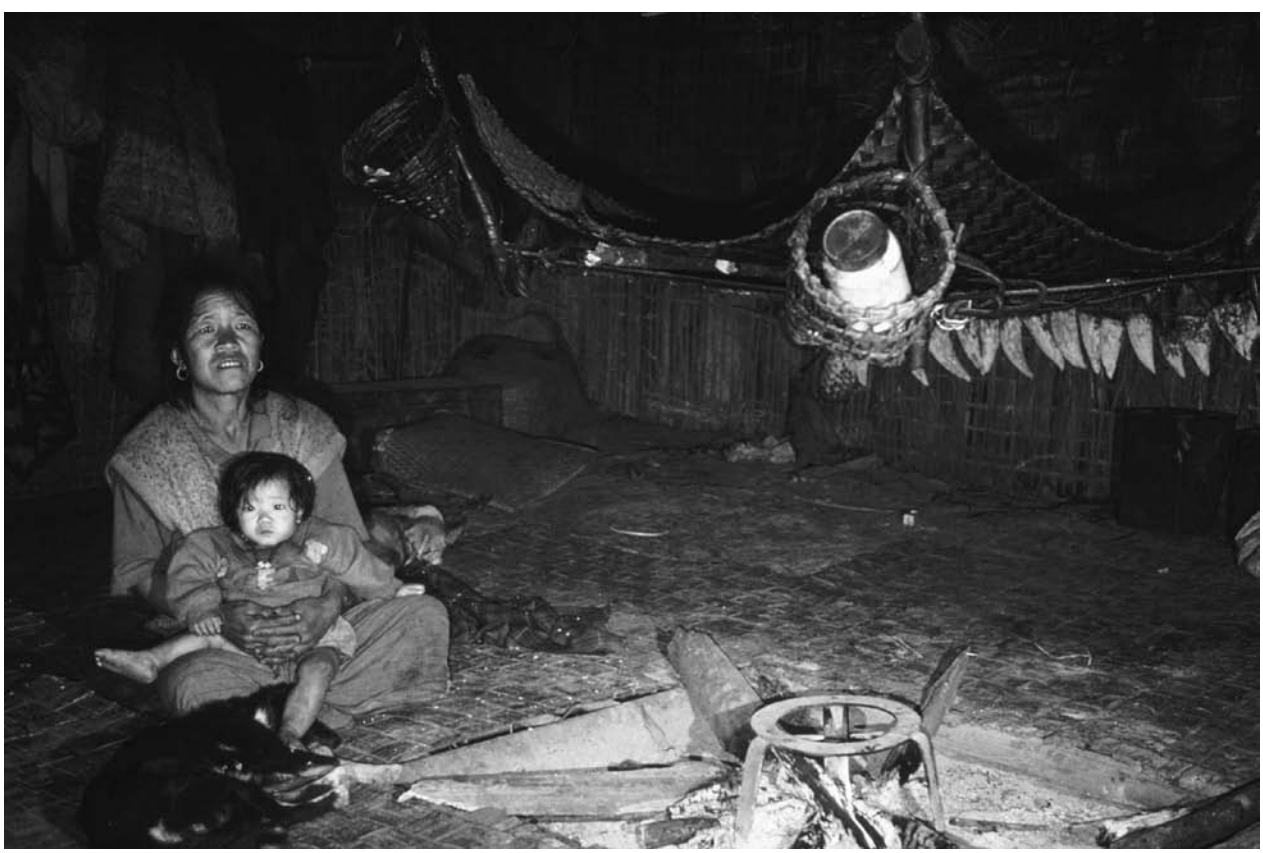
P. 137: man shoots an arrow, Tagin house, Mara, 1999.

P. 138: Tagin house in D. 067, Poda Mara, 1999.



D. 067: Tagin house, Poda Mara – plan and sections.

P. 139: sitting on the veranda, Tagin house in D. 067, Poda Mara, 1999.



P. 140: mother and child sitting near the fireplace, Poda Mara, 1999.

P. 141: looking down from the veranda, Tagin house, Poda Mara, 1999.

After some pleasant talk, I started to study the house and make a drawing—before dark we had to be back at the car. A veranda went around the two central rooms, one of which was twice as big as the other. 'The big room has two fireplaces,' I'm told. 'Two ladies live in the big room, both wives of the deceased grandfather. Sons and daughters have already left the house; one is a doctor and works in Manipur, while the other one studies at Guwahati. The three daughters are a nurse, a policewoman and a student.'

Later they explained, 'The smaller room has only one fireplace and is for the rest of the family: an old man (younger brother of the deceased grandfather), his wife and seven children. In total 11 people live in the house. When the grandfather was still alive and his children were still at home, the total was 17.'

The construction of the house was difficult to determine; it appeared that there were more shores and cross-poles than columns and beams. When I had made some progress in my examination, they called me to look at the interior of the two central rooms.

In the small room, mats lay near the fireplace: on the left side and behind for husband, wife and kids; and on the right side and in front for guests. In the left corner was the altar for rituals, if somebody was ill. On the left side behind was the ritual place with mithun and boar skulls on the wall. Behind and on the right side stood the funnel in which they made beer from rice or millet. The interior of the bigger room with two fireplaces was similar.

After being treated to a nice meal in a neighbour's house, we said goodbye and thanked them for their hospitality. The boy who came with us stayed in his village, and another boy took us back.

GALO

Overview

Galo villages are often situated on high spurs or hill slopes, though some are found also in the river valleys, and they contain some 20 to 30 evenly-spaced houses in rows or in rectangles, depending on the topography. Granaries are built at some distance from the houses.

The large, square houses are built on a platform on posts and the roof is ridged or hipped. The house consists of one large central room with a wide veranda on all sides. Two entrance staircases of notched logs lead to the veranda; in the past, one was for men, one for women. In the room are two fireplaces, one for cooking and one for making rice beer. Above the fire hangs a multiple rack. The veranda has wide benches for sitting and sleeping, and sometimes it also has a fireplace. On a separate partition of the veranda are pigsties and baskets for chickens at night. The materials used are wood and bamboo for the construction, and split bamboo for walls and floor. The roof is thatched with palm leaves or jungle grass.

The Galos have no dormitory system, only a *dere* used as a meeting hall.

Commentary

We were led to the Galo village of Tapi by a local woman, who used to live there. We followed her to one of the big, square pile houses, where we were introduced and received kindly (D. 068, P. 142, P. 144 and P. 145). Sitting between inside and outside on the marvellous wide bench on the veranda, I started to make drawings and photos. The house was really gorgeous, one of the most beautiful we had seen.

P. 142: Galo house in D. 068 and village, Tapi, 1998.

P. 143: Galo granaries, Bame, 1998.

The wide veranda went all around the centrally situated living room. One of the men showed me the living room with the two fireplaces and said, 'This is the place for sitting, receiving guests, cooking and eating. At night we sleep on mats around the fireplace.' Pointing at three big funnels in front of the wall, he explained, 'They're for making beer.'

One half of the veranda, with its long benches and an external fireplace, functioned as an outside living room. The other half was for pigsties, chickens in baskets and general storage. The front entrance had two notched tree trunks leading up to the veranda, one for men and one for women, though these rules had fallen out of use. Off to the side was a separate small sleeping room, only accessible from the living room, a modern development which we would see often.

In the living room a lady was going to make millet-beer and asked us to have a look. From the cooking vessel above the first fire she ladled boiling water into a bamboo container, which she carried along a small staircase up to an attic to pour it from above into one of several large funnels. The enormous funnel, of plaited bamboo and lined with banana leaf, was filled with millet and probably some yeast. The liquid dripped down and was collected in a big metal pot.

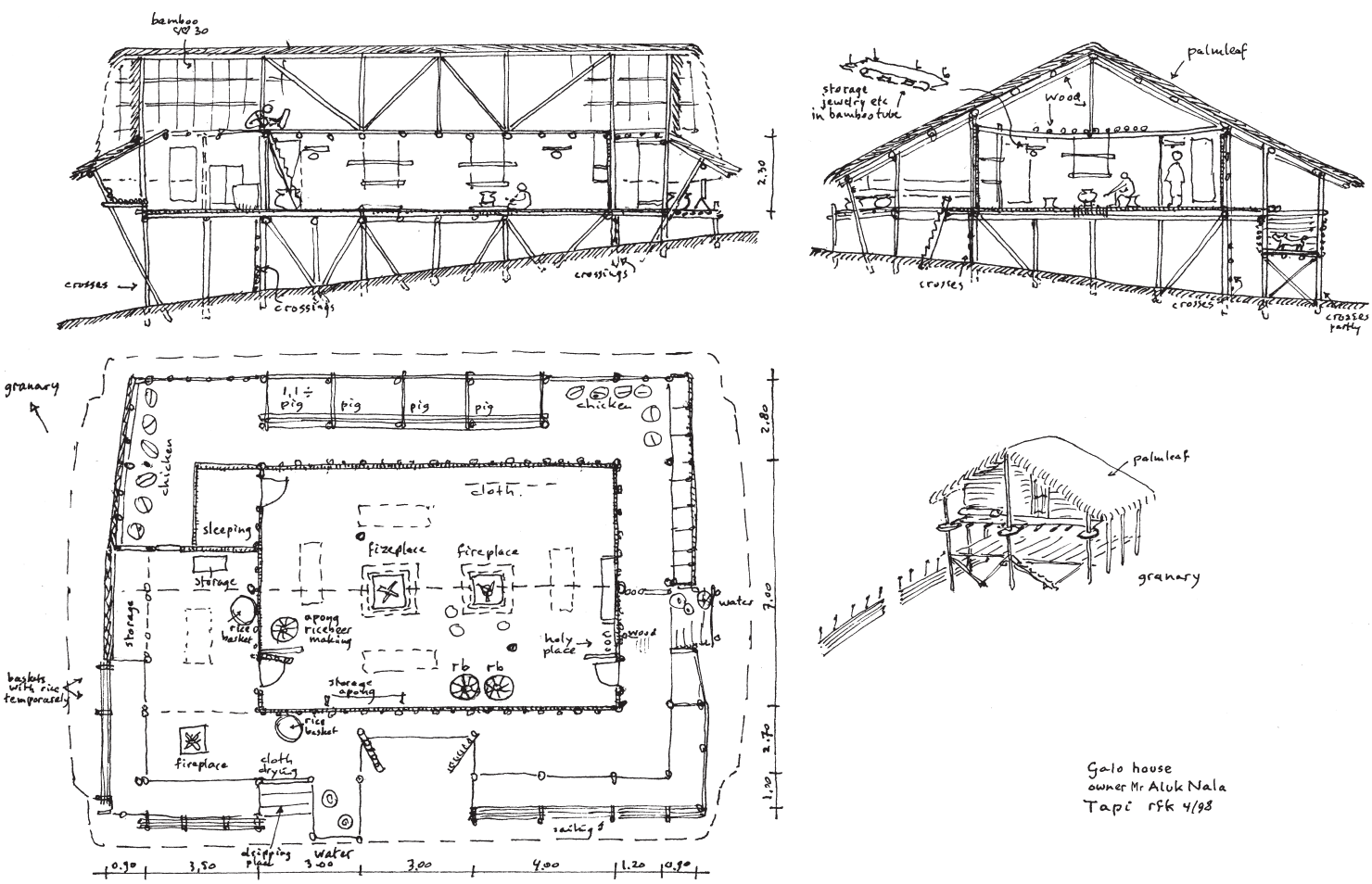
Going on with my drawings, I realised it was difficult to capture the essence of this house. The hundreds of posts (head-, side- and sub-posts, not to mention the shores and crosses) complicated the image. Not all the wall-posts were supporting so the main structure of the construction was difficult to understand. But studying the posts above and under the platform made things clear. Small flies bit me during my work, particularly on the veranda and around the house.

The rice granary was located at some distance from the house (P. 145). This was to prevent a fire from the house—frequent with open fireplaces—destroying the granary. A house could be rebuilt quickly and easily, but without rice there was nothing to eat.

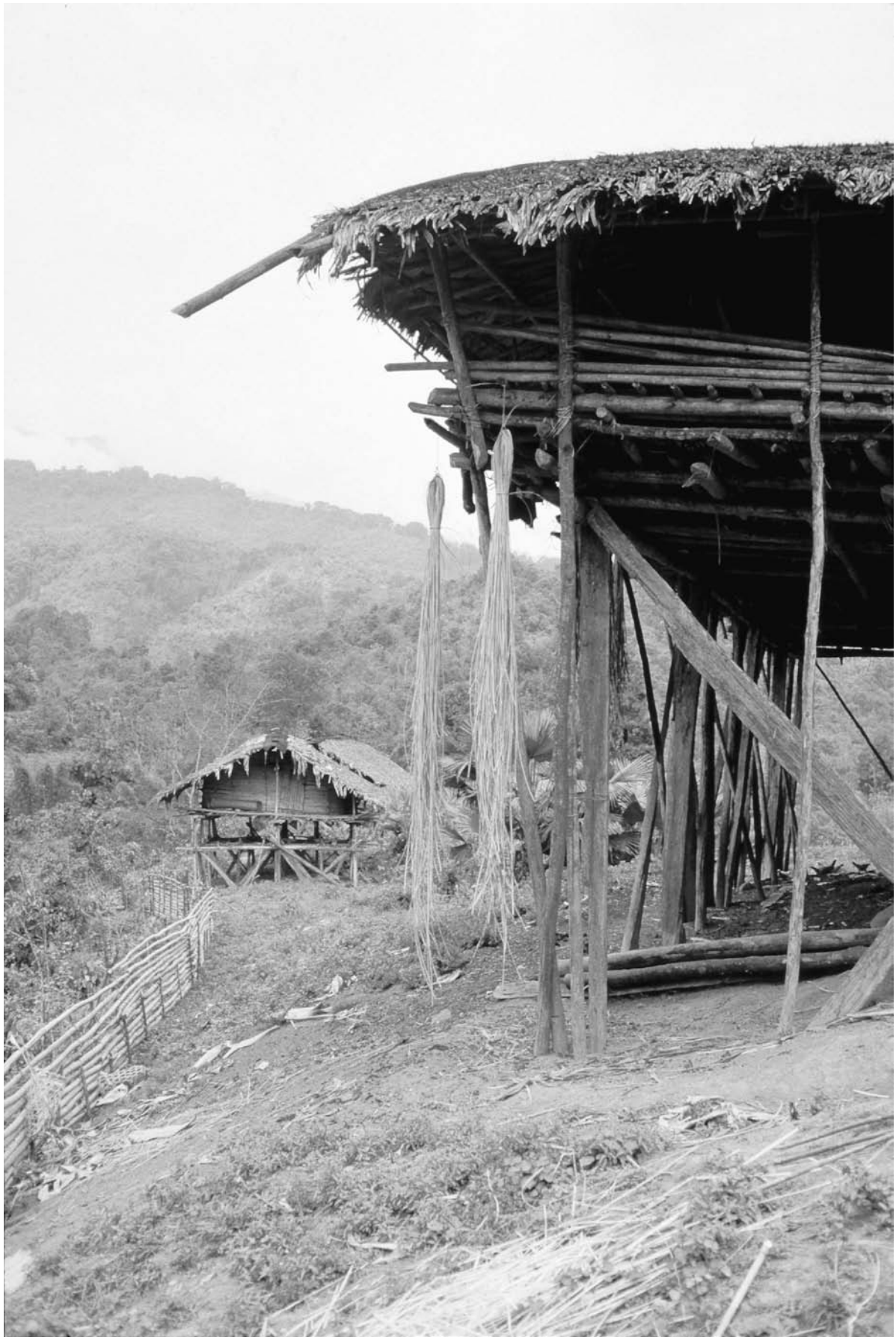
Big circular wooden disks were placed on top of the posts to prevent mice and rats from getting into the granary (like we also saw in Bame, P. 143). At that time, the granary was empty, waiting to be rebuilt, and the rice was temporarily kept in the house in an enormous cylindrical basket on the veranda.

In the Galo village of Kabu we saw some new houses, one at the entrance. A local boy showed us the house and explained that it belonged to his 'older brother,' who turned out to be a clan member with

P. 144: Galo house in D. 068, Tapi, 1998.



D. 068: Galo house, Tapi – plan, sections and granary view.

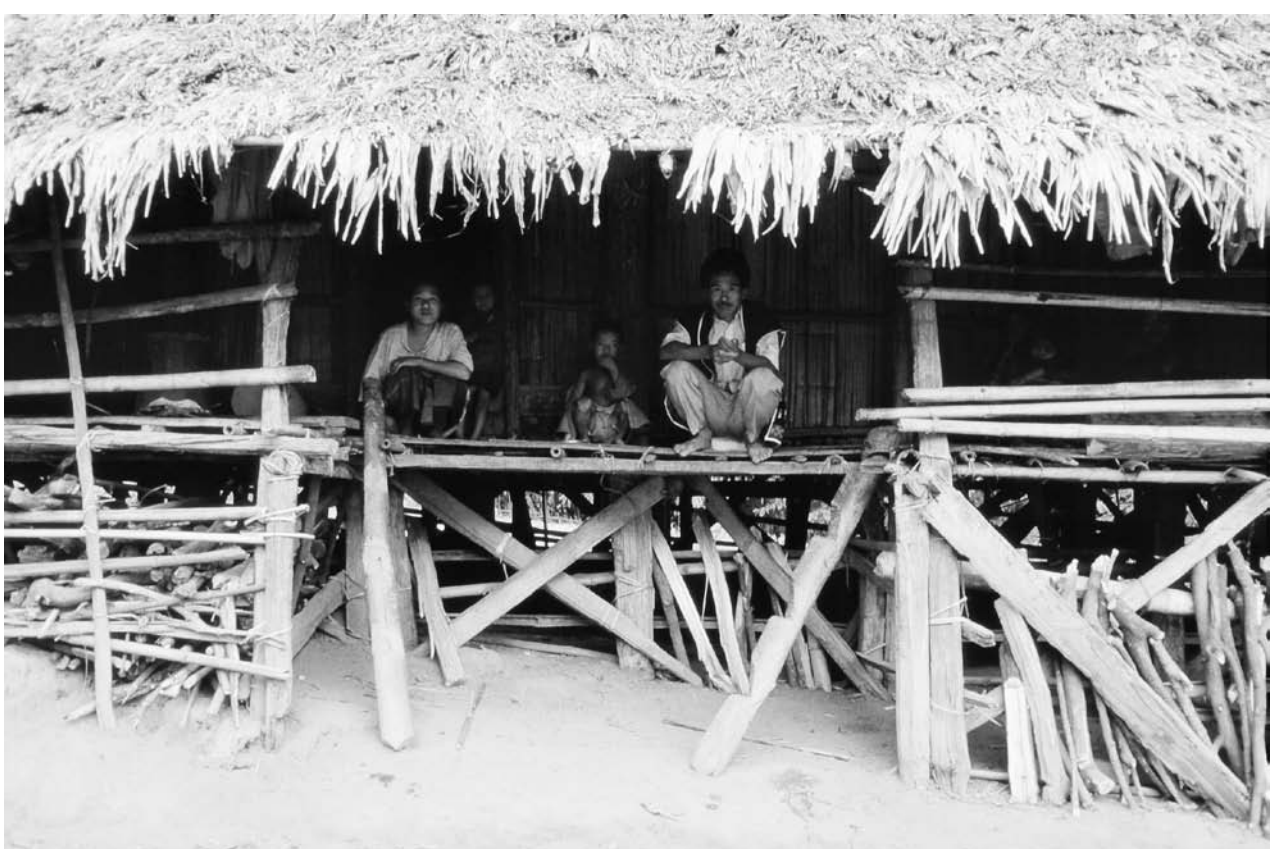


P. 145: Galo house in D. 068 with the granary behind, Tapi, 1998.

P. 146: Galo houses, Paya, 1998.

P. 147: Galo house, Paya, 1998.

P. 148: Galo houses, Champak Chojo, 1996.



P. 149: entrance of Galo house, Champak Chojo, 1996.

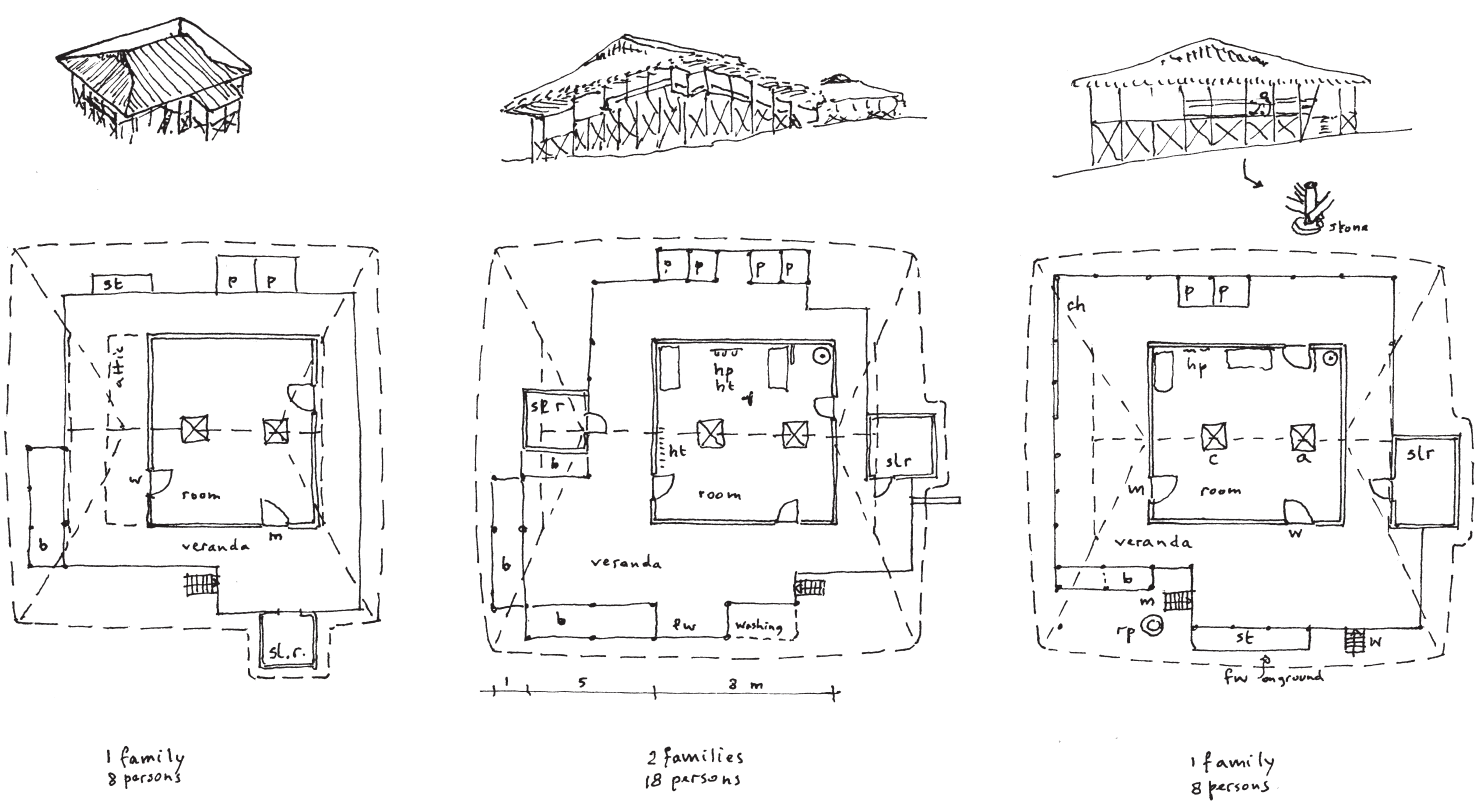
a government job in Calcutta. The house looked a bit like a chalet in Switzerland, with wooden handrails and profiled balusters, windows, wooden walls and a complex shaped metal-covered roof.

It was interesting that whereas the materials and details were modern, the main ground plan still corresponded to the traditional Galo house: a central living room with fireplace, a wide front veranda with wide bench. Only the side and back verandas were not open and utilised as sleeping rooms and bathroom. At the corner the front veranda was extended with a separate and slightly elevated reception-room with a concrete floor, red painted brick walls and a balcony; the balustrade had iron balusters. The space under the reception-room was a car-port, where a luxury car was parked (P. 150 and P. 151).

The style of the veranda was luxurious, too: a floor and bench made of smooth planks of hardwood, a ceiling with blue painted beams and white ceiling-panels. The wooden columns, floor- and roof-edges, windows and balustrade were also painted but light blue. Only the central living room was made in the traditional way, with bamboo walls, an elastic bamboo floor (with the bamboos a bit apart) and a sunken fireplace.

In the village we saw other houses more or less modernized, only not so extravagant. They had traditional palm-leaf thatch, and the modernization was limited to concrete columns, concrete staircase, modern balustrades and such.

The owner of the very modern house, the man from Calcutta, arrived. He introduced himself as Mr Lovi and invited us into his garden where we sat in chairs. He told us that 'the house, the way of building and appearance especially, is the work of my wife.' We learned that Galos don't have a dormitory system

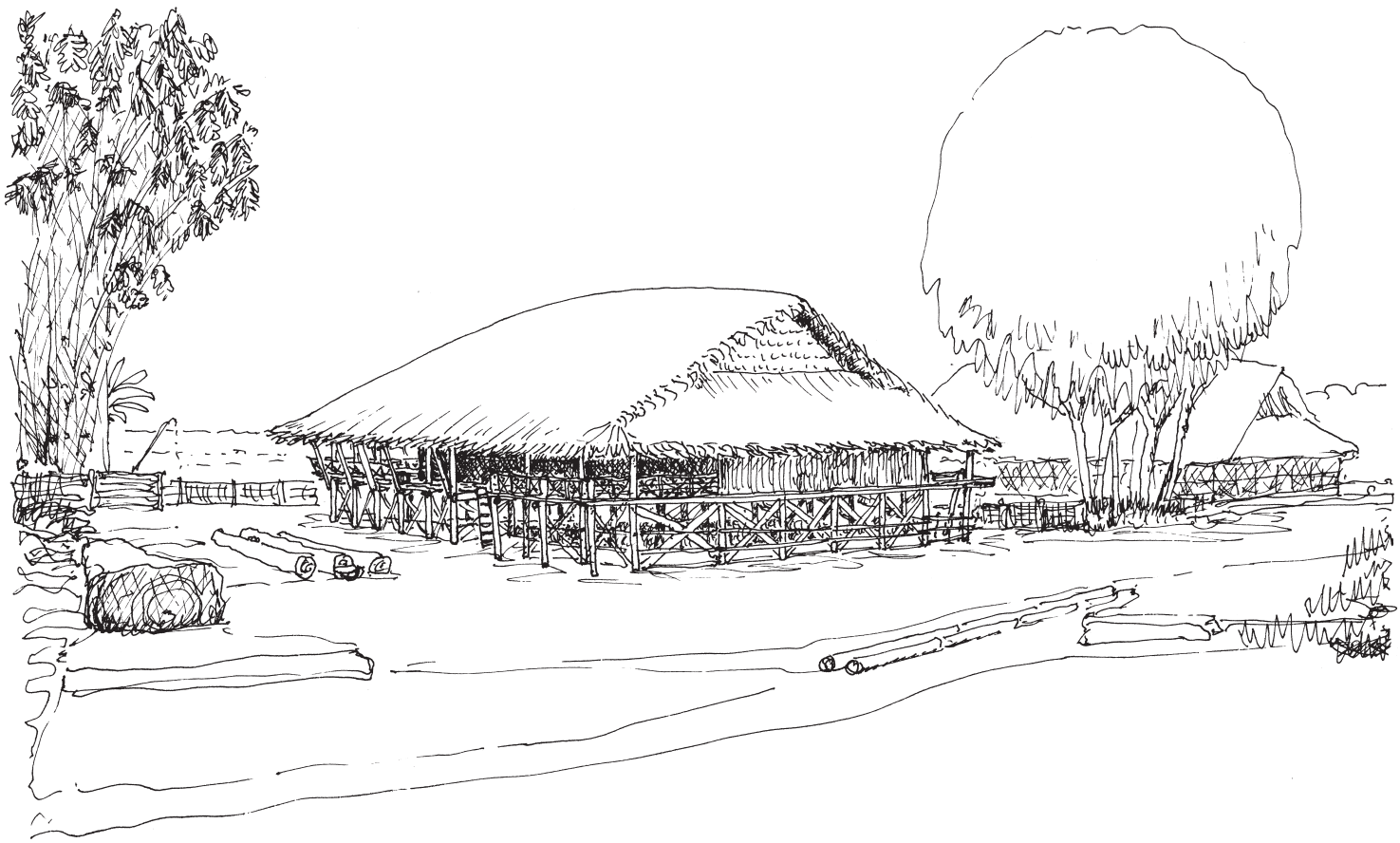


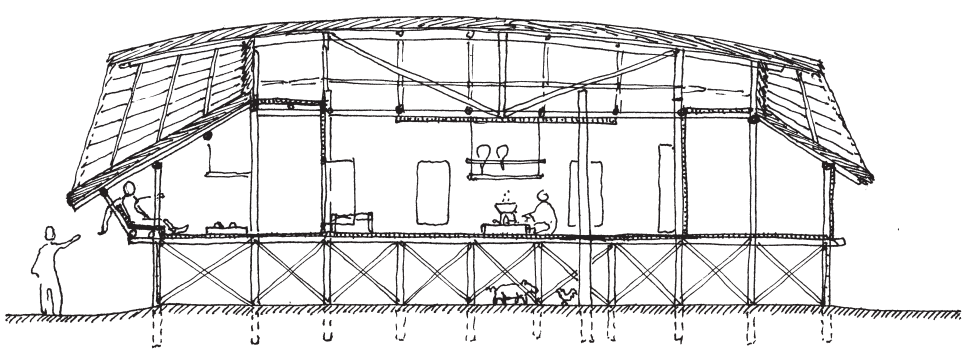
⊠ = fireplace
c = cooking a = apong
⊙ = apong making
w = entrance for women
rp = rice pounding
st = storage

hp = holy place
ht = hunt trophies
b = bench
p = pigs, toilet (÷1,3)
ch = chicken
fw = firewood

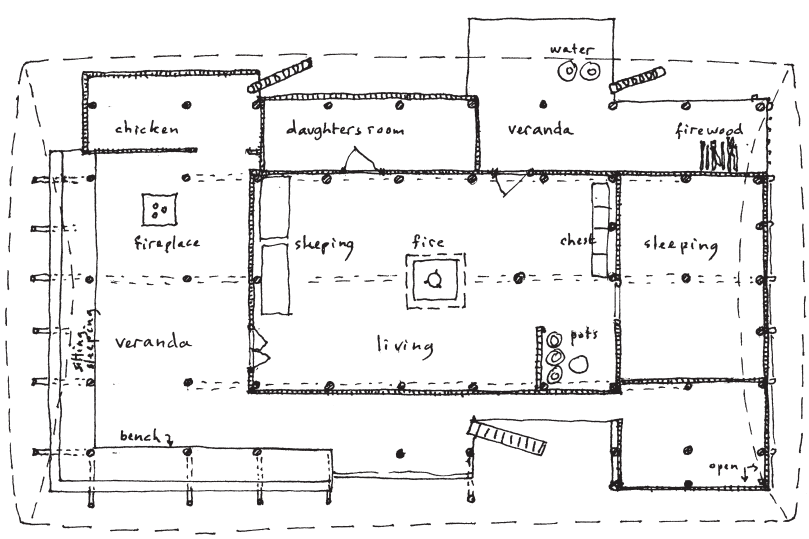
Galo houses
type + variations
Paya rfk 4/98

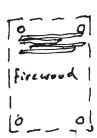
D. 069: Galo houses, Paya – plans and views.

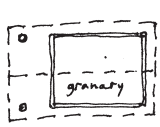




Galo house
Champak Choio
rfk 11/96







D. 070: Galo house, Champak Choio – plan, section and view.

for boys, like Minyong Adis, but they do have a building by the same name (*dere*), which is a community meeting hall.

I then asked him why Galo granaries have an intermediate floor, and he explained that this creates more distance between the rice and the ground, making it harder for rats to get the rice. But why don't Minyong Adis have this intermediate floor? I wondered. And is the space under the intermediate floor for storing firewood? 'Not logical,' said Mr Lovi. 'The distance to the house is too much for carrying firewood.'

Near Kabu village we crossed a cane bridge (P. 152). Some fifteen steel cables stretching over the river were kept apart by cane bows, and one walked across on strips of split bamboo kept in place by the cane bows. Originally the cables had been made of cane strips tied together.

Crossing the first time was exciting. The river was at least 50 metres wide and rather deep, and one walked many metres above the water level, while the bridge swung and shook. Later looking from beneath, I was astonished to see women, with a child on her back or a basket full of firewood, walking relaxed, rather fast and not holding on to anything. With their experience, they knew to walk so that the bridge hardly swung.

We crossed another cane bridge and came to the Galo village of Paya. Here, most houses stood more or less at equal distance from each other, in a kind of chess-board pattern. In total there were some 50 houses and a lot of granaries, plus some small modern buildings, a *dere* (meeting hall) and sheds with machines to grind rice. In two cases the houses were built so close that the roof of one reached above that of the other—dangerous in case of fire.

We visited three houses, which I drew in schematic plan (D. 069, P. 146 and P. 147). Now the basic plan was becoming clear: a central closed room with mostly two fireplaces, ritual place, a wide open veranda that surrounded the room and had very wide benches, connecting inside and outside space.

The differences were in the shape of the veranda, the number of fireplaces in the central room and the number of pigsties. The latter were mostly situated at about 1.1 metres under the main platform in the veranda strip, and occasionally on ground level or apart from the house. And often one or more bedrooms were made on the veranda. Another difference was the number of entry staircases, traditionally two, but here often one.

In the Galo village of Champak Choio along the Assamese border, we visited a single-family house where nine people lived. The house was a bit modernised, with two sleeping rooms on the veranda (D. 070, P. 148 and P. 149).

P. 150: modern Galo house with carport, Kabu, 1999.

P. 151: veranda and wide bench of modern Galo house, Kabu, 1999.

P. 152: crossing a cane bridge, near Kabu, 1998.

ADI

Overview

Freestanding Adi houses are situated on hilltops and hill sides, more or less in rows, and sometimes on both sides of a road. Granaries are built a little distance from the village, as protection against fire. Since about the 1970s, some villages have built small halls for Donyi-Polo (or Sun-Moon) worship.

Adi houses are usually rectangular and built on platforms supported by piles. A tall roof overhangs, often with sloping or rounded eaves. The front and back doors are aligned, and a large living-room has a central fireplace and sometimes separate sleeping areas. At the back or side a smaller, second veranda is often connected with a pig sty or toilet.

The large L-shaped front veranda, reached by a small notched tree-trunk staircase, is used for sitting and weaving. One side or corner is used for rituals. It leads to a wide terrace, used for sitting and drying rice.

Under the roof the open space beside the front veranda is used for the cow and sometimes chickens at night and rice pounding. The second veranda is for water storage, keeping chickens and leads to the pigsty, as well as a toilet.

The main structure is made of wooden poles, shores and beams, while the supplementary structure uses bamboo. The walls are made with wooden planks, flattened bamboo or palm leaves. The roof is thatched with palm leaves and sometimes banana tree-trunk fibres.

Many Adi groups build a boys' dormitory, called *moshup* by Padam Adis, *dere* by Minyong Adis and *bange* by Bori Adis. Padam Adis also build a smaller dormitory for girls, called *rasheng*. These dormitories are built like houses only larger; in some there is a separate fireplace for each quarter of the village. The male dormitory is open to any man, local or visitor; the same principle applied to the female dormitory.

Commentary

MINYONG ADI

Along the Siyom River, in a tea-house we met Mr Tarking, an inhabitant of Jombo Bari. In fact it was a double village, the lower part was Jombo, and the upper part was Bari.

Bari village, situated high on a mountain ridge, had beautiful houses. Along plastered steps of a recently made staircase in the middle of the village we followed Mr Tarking to his house standing higher on the slope (D. 072).

We were welcomed onto the platform of the house and offered a mug of rice beer. His old father came and sat nearby, looking radiantly happy (P. 154). He talked verbosely to me in the Minyong language and I answered him in Dutch, yet we seemed to understand each other a bit.

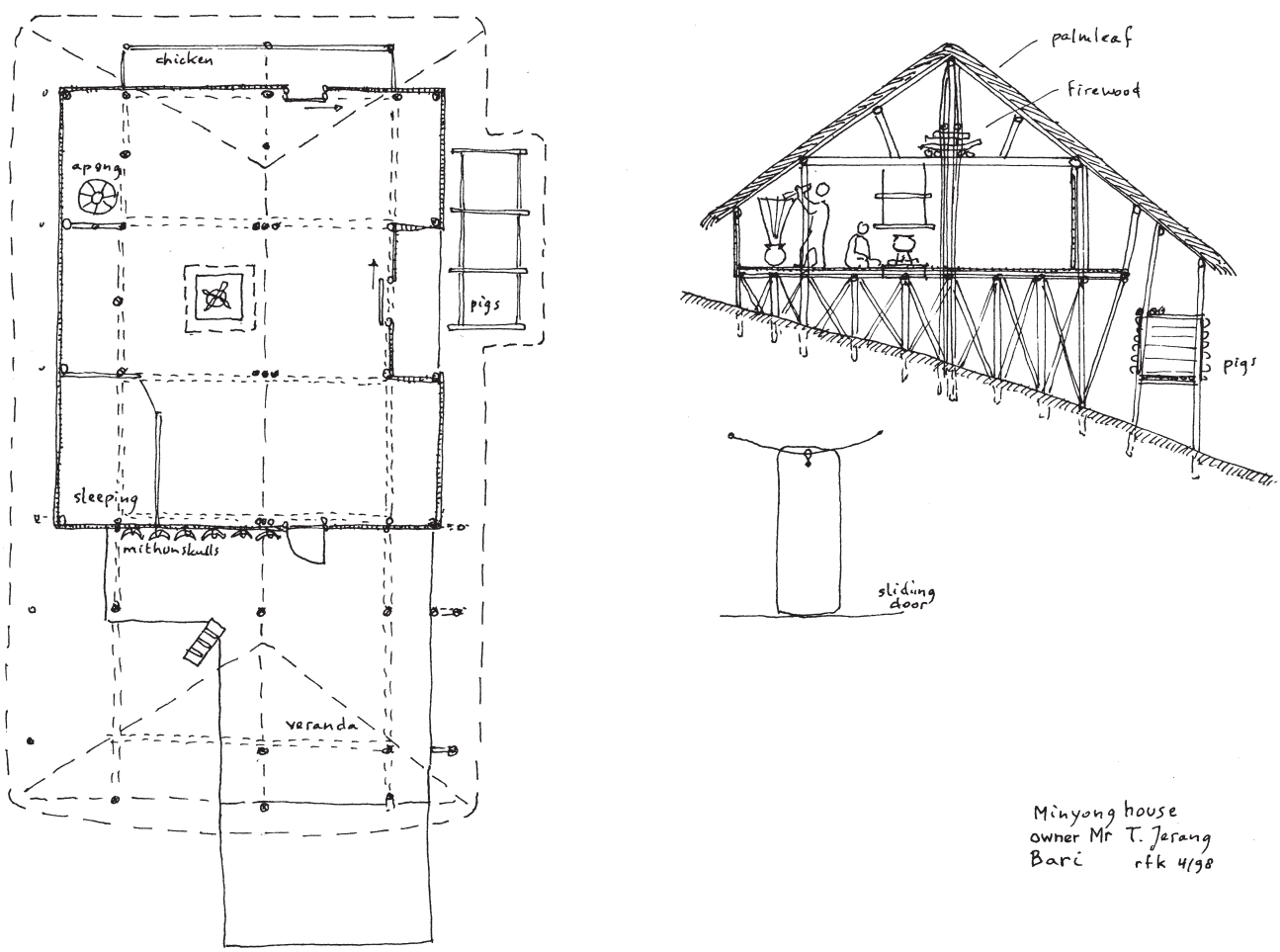
He was about eighty years old, with only slightly inflamed eyes, but was extremely short-sighted. I noticed this while showing him two of my drawings, as he was doing his very best to see what it represented. But it seemed that he liked them.

The next morning we visited Bari again. The sky was heavily clouded and it started to rain. The old man was not at home, but his son's wife was. When the old man came back he looked happy to see us. A bit later a young man returned, feeling sick, having drunk too much the night before.

When I made my drawing of the house, for some reason the woman wouldn't let me look inside the living room—maybe because of a ritual. So I asked how the room looked inside and made a comparison with the house in Tarak, another Minyong village (see below and D. 073). The young man told me that the room had one fireplace and two separate, small bedrooms. Four columns stood around the fireplace, as in Tarak. Later we were told that the young man had brought home 12 bottles of beer to sell in the village – maybe these were standing in the room and that's why I was prevented from looking inside.

Walking around the house, and surveying all of it carefully, a curious young woman, about 18, walked with me to look at what I was drawing. We asked her

P. 153: Minyong Adi house in D. 071, Bari, 1998.



D. 071: Minyong Adi house, Bari – plan, section and detail.

P. 154: old man on front terrace, house in D. 072, Bari, 1998.

if we could also see her house and then went with her, where her mother agreed and let us inside.

The house looked the same as the other, with a big living room and front veranda, which continued as a terrace beyond the reach of the roof (D. 071 and P. 153). A short staircase under the roof was the entry to the front veranda, which was used for drying rice in the sun. On the wall of the living room we saw hanging mithun skulls, and underneath were large baskets and a bamboo container for collecting water.

The layout of the room differed from the one in Tarak. Here the ridge-beam was supported directly by two clusters of free-standing central columns, each cluster comprised of three thin columns. The fireplace lay to the side of the central axis of the house. On the left side at the back stood the rice-beer funnel, which the mother was busy with. On the right side wall a sliding door gave entry to the landing towards the pigsties. The construction of the sliding door was the simplest I have ever seen: made out of one piece, the wood door leaned on the floor and at the top was fixed with a noose to a loose thread stretched along the wall that kept the door upright.

A small door in the back wall led to a narrow back veranda, where the chicken baskets stood. In the evening the chickens, together with the young ones, were put into the baskets, where the hens lay their eggs.

On the edge of the steep slope along the village square stood the dormitory (*dere*), with a platform one metre above the ground and an entry staircase in the middle and a veranda at both ends. At the slope side the supporting poles were high. The oblong space inside had three fireplaces on the central axis. The remains of the Mopin feast lay on the floor.

An opening halfway on the slope side let in the daylight, and from here I enjoyed the marvellous view over the valley. Through the clouds, in the rainy hazy valley, the lightning silver ribbon of the river split and came together again.

Next we visited Tarak village, where we looked at a house and a dormitory. The house-owner, Mr. Jomang, welcomed us and let us look around (D. 073). In the big living room the fireplace lay on the central axis and between four double columns, each consisting of two spars. Each pair of double columns was connected at the top by a tie beam, and halfway up a standing crown post supported the ridge beam.

This differed from the Minyong houses in Bari, where the fireplace lay off the central axis. Later we realised that most Adi houses had the middle columns and the fireplace on the central axis. Another difference was that here in Tarak the veranda did not reach beyond the overhanging roof. This may have been due to contact and influence from Galos.

This house also had the system of two sliding doors, which lean on the floor. The front door slides above in an open cut bamboo, while the side door slides behind a hanging piece of bamboo.

Behind the house was a big pigsty, consisting of three compartments. It was connected by a narrow landing with the side veranda of the house.

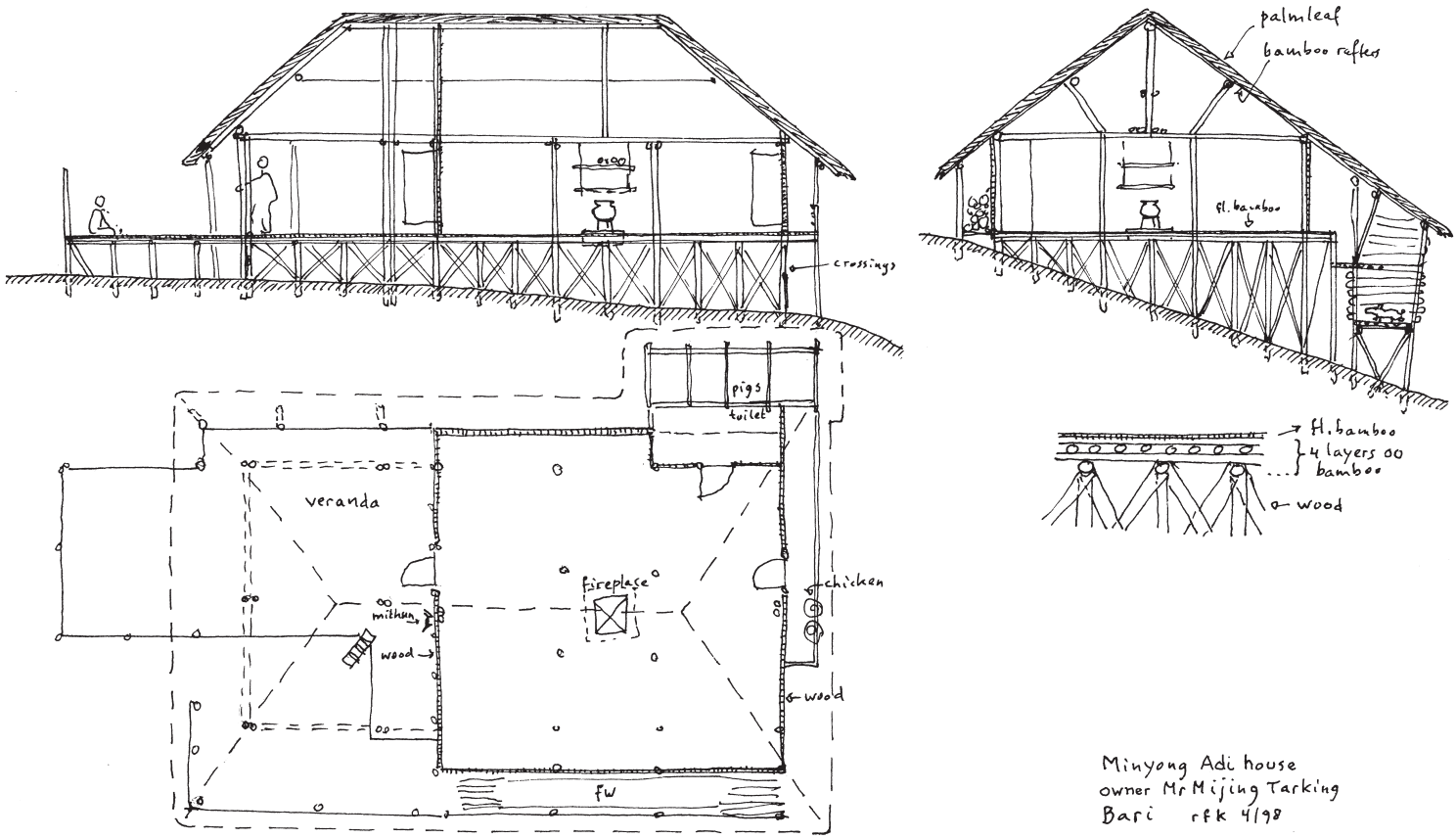
The dormitory or community-hall (*dere*) was different from the one in Jining (see below). This one was more oblong, had walls, a full veranda and six fireplaces. The entry staircases to the platform were at the ends (D. 076). This dormitory was not used for sleeping anymore, however, because they have schools. It functioned only as a community centre.

The third Minyong village we visited was Jamlo Mobuk, which we had to climb up to on foot. More than one footpath led up to the village, and local people pointed to a steep one. It soon became the most tiring climb we had. I felt a little ill and perspired a lot, having to stop every 50 metres or so. Higher up it was evident we had taken the wrong way; the path ended near a millet field. Climbing over fences, which protect the fields against mithuns, and struggling through tangled weeds, we arrived finally on the entry path to the village. After three hours of climbing, we reached the village, resting on a more or less flat mountain top.

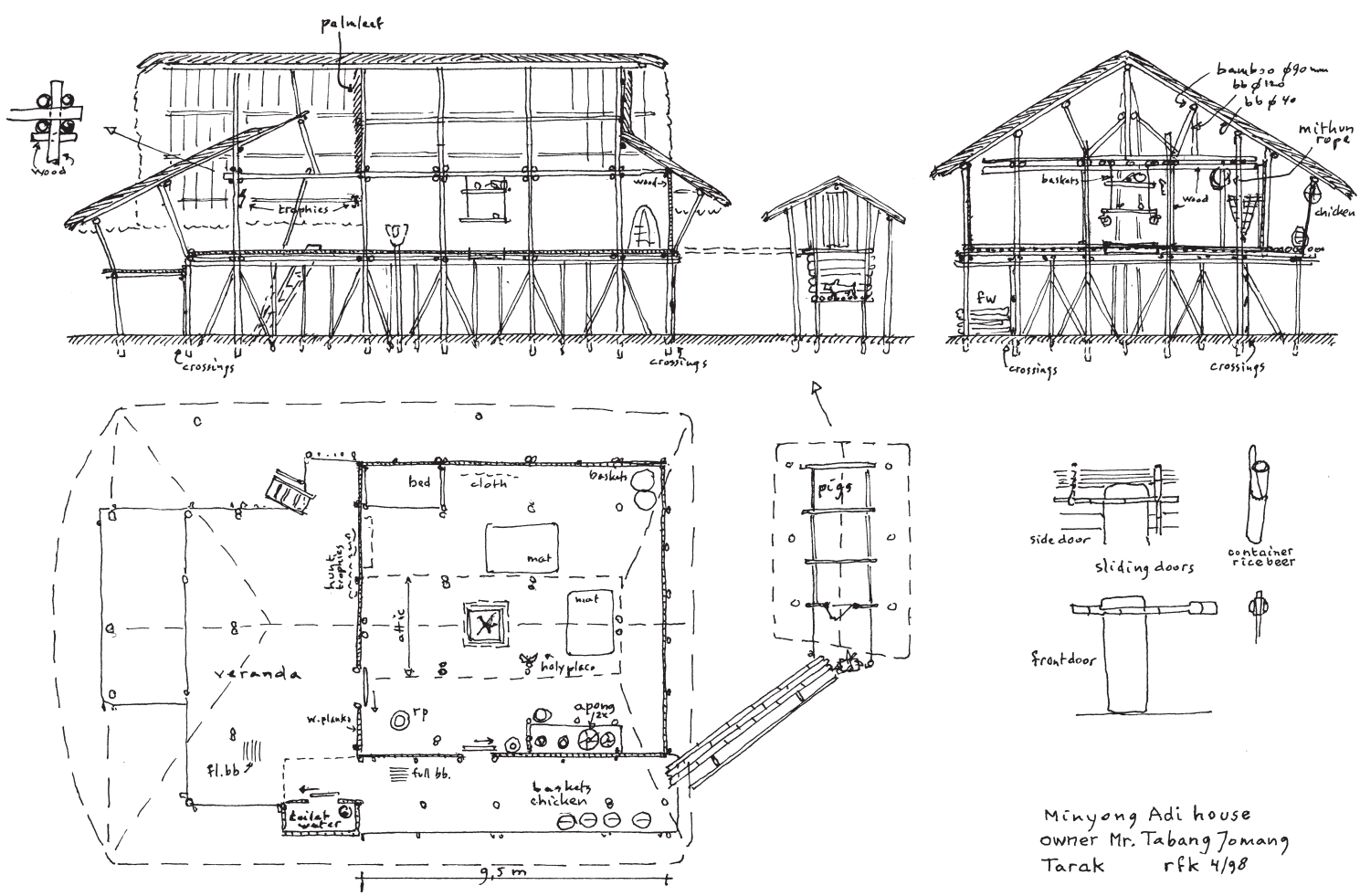
Jamlo Mobuk was the kind of village we were looking for. At the front were a little school and the house of the school teacher. Beyond these lay the village, with 17 families and 80 persons. In front of one of the first houses a man wore a typical Minyong hat (like a flower-pot) as he sat working. After greeting we sat down near him to take some rest and looked at what he was doing—plaiting a rucksack with split cane, both clever and beautiful.

The dormitory (*dere*) stood with its axis in the direction of the slope and with tree-trunk stairs leading to the entrance (D. 074 and P. 155). The large rectangular hall had two big fireplaces and in the rear a little built-out room. The floor of the hall was of flattened bamboo, while the walls were made of wooden planks piled up horizontally between poles and tied up with cane. The roof was covered with fan-shaped palm leaves on bamboo purlins and rafters.

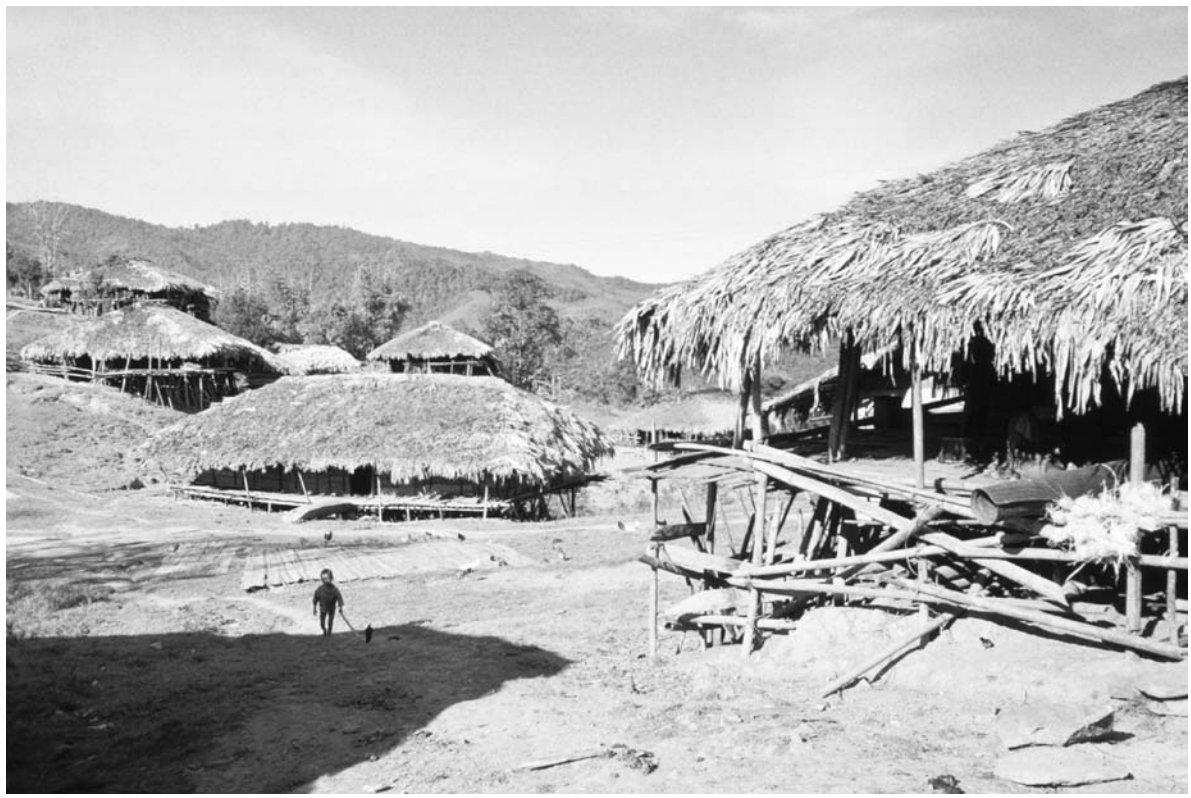
One of the men looking on from some distance was the schoolteacher. I asked him about the little built-out room in the rear and he said, 'That room is used to make arrow-poison. Nobody is allowed to



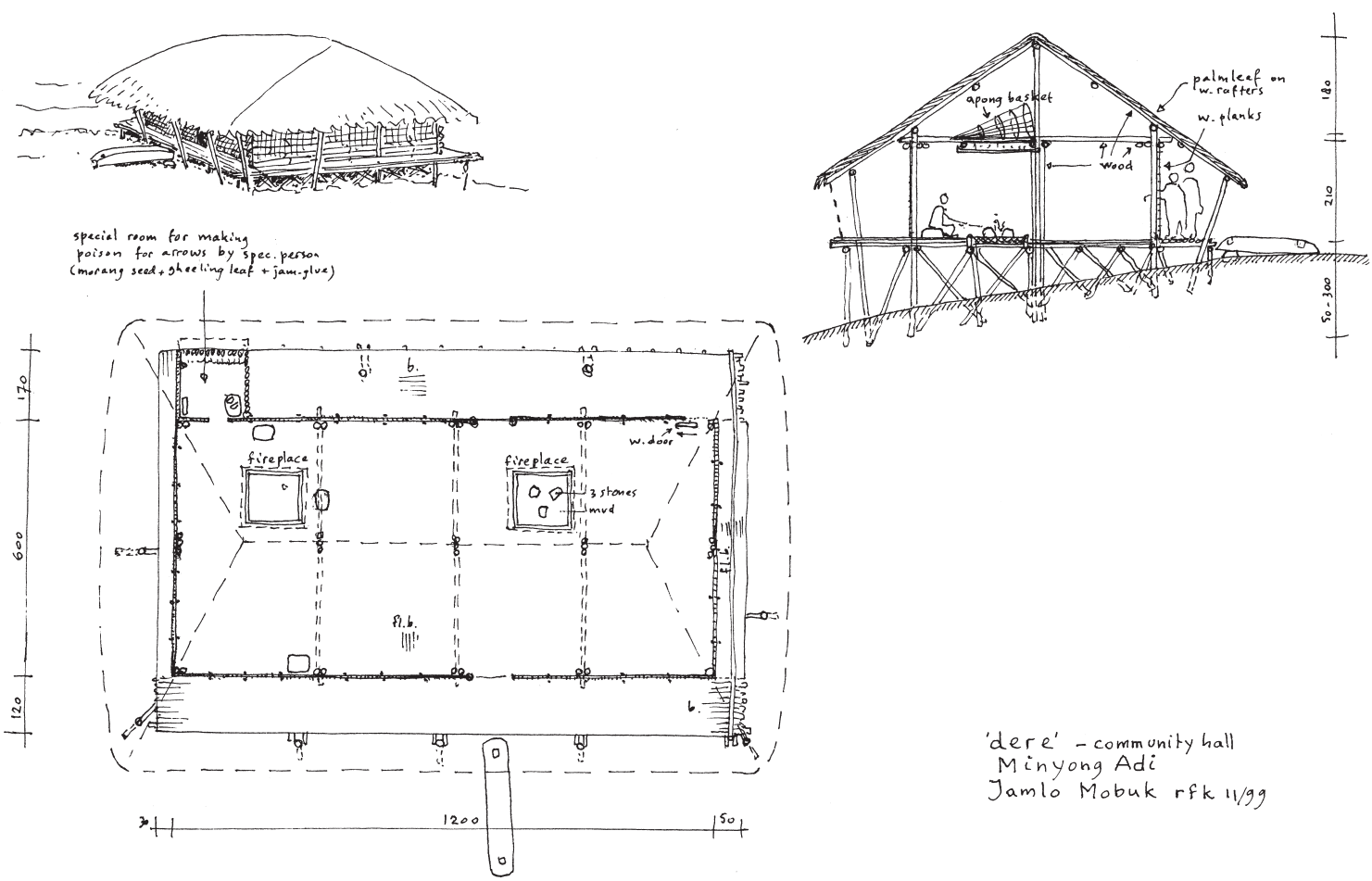
D. 072: Minyong Adi house, Bari – plan, sections and detail.



D. 073: Minyong Adi house, Tarak – plan, sections and details.



P. 155: Minyong Adi male dormitory (*dere*) in D. 074, village Jamlo Mobuk, 1999.



D. 074: Minyong Adi community hall (*dere*), Jamlo Mobuk – plan, sections and view.

P. 156: little boys playing with self-built carts, Logum Jining, 1999.

enter, and nobody does either.' When I pointed with concern at the open entrances, they said, 'Not even the little children.'

Together we had a brief look at the little room. On the floor lay two big flat stones and two little rubbing-stones, which were used to grind seeds and leaves of special poisonous jungle plants. The powder was mixed with a glue made from tubers and then put on the arrow-points. 'The meat of an animal killed with this poison is not poisonous after it is cooked,' they said. So this was a bit different to the Hill Miris, who cooked the meat with a special kind of bamboo to make the poison harmless.

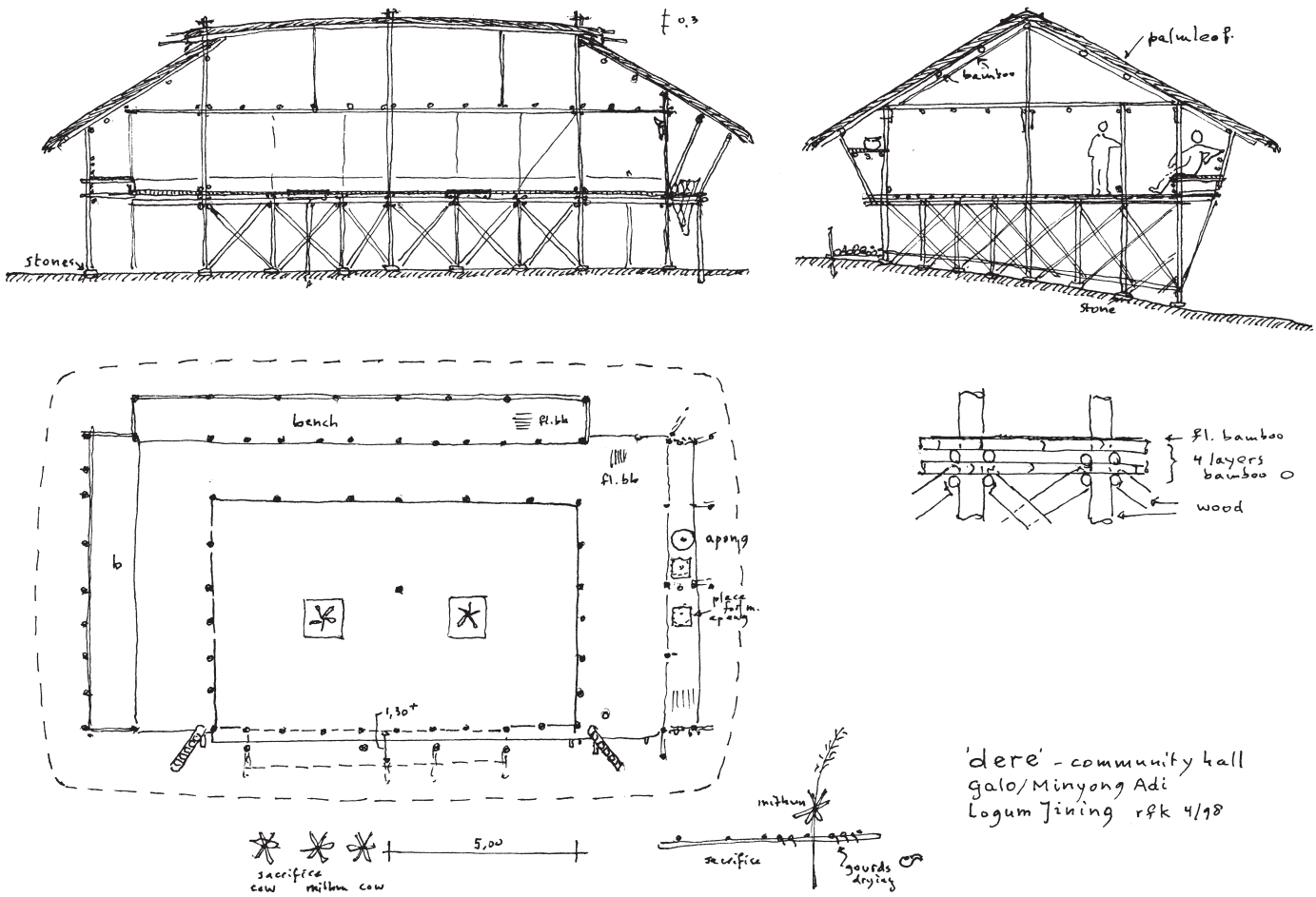
Finally, we visited Jining (or Logum Jining) village, much further south, in the Siyom River valley. This village seemed to be a mix of Galo and Minyong traditions. Anyway, it had not only beautiful houses but also a recently-built dormitory (*dere*). It was used for festivals, as a club house and a meeting place for the village council, but not for sleeping. The Galos never had a dormitory system, whereas the Minyongs did.

The hall stood on a raised platform, accessible via two tree-trunk staircases (D. 075). The open hall had two fireplaces and wide benches along two sides, while another one short side was reserved for making rice beer. The roof of palm-leaves extended far and covered the whole construction. In front of the hall were places for sacrificing mithuns and cows, and a long standing rack with gourd cups for drinking beer. Nearby stood a similarly shaped but modern built hall with concrete columns and metal roof. I was afraid this one was going to replace the traditional dormitory.

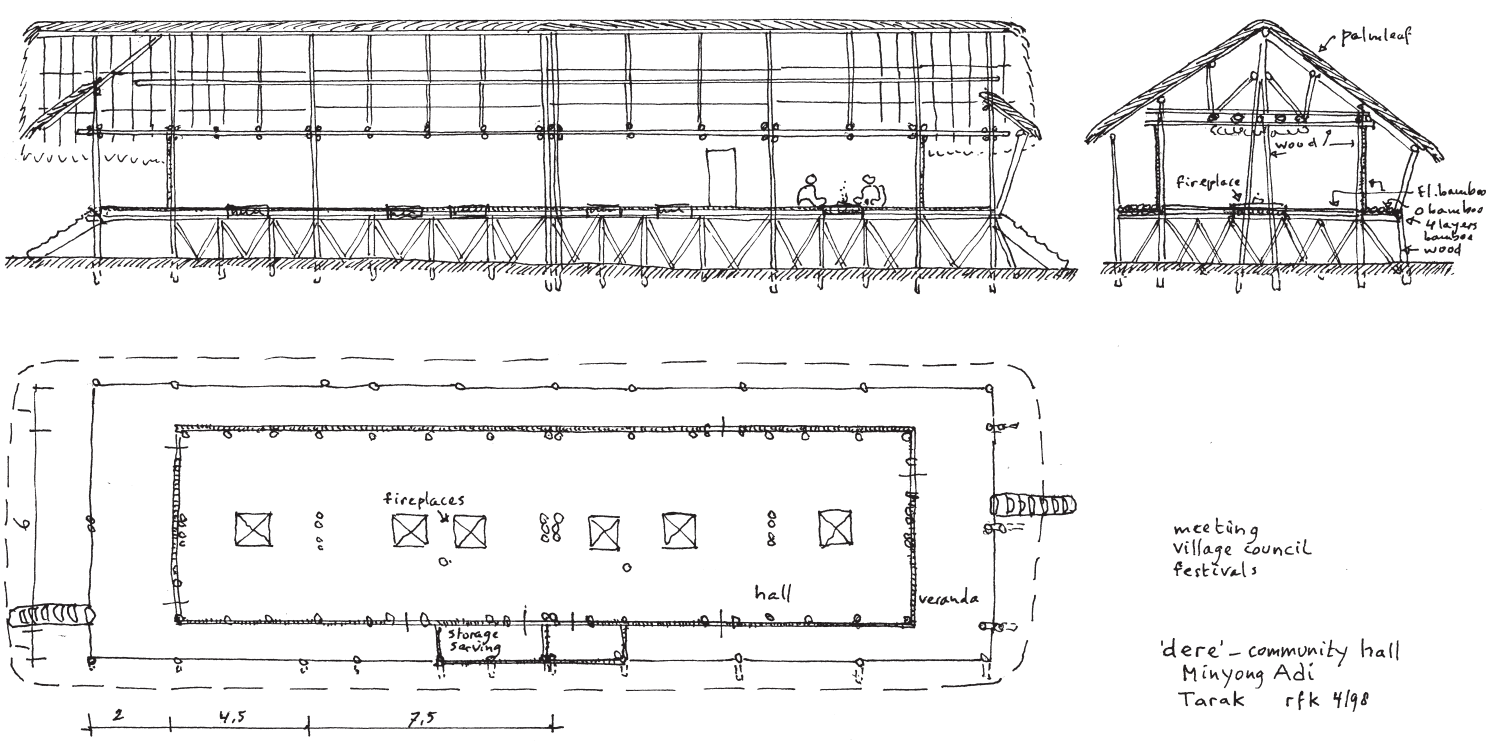
In contrast with Galo villages, here some of the houses had a terrace that extended beyond the roof and was used for drying rice, sitting and sleeping. These houses looked more like Minyong houses or perhaps the shape had simply been borrowed.

One year later we visited Jining again. The traditional dormitory was luckily still there and in the same condition. And so was the modern one, which hadn't yet replaced the traditional dormitory.

When the villagers came close, looking curious, I showed them my drawing of the dormitory and of Galo houses in other villages. One man, who spoke a little English, answered my question about whether Galos and Minyongs lived in the village. 'The whole village was Galo. Minyongs lived beyond the district border in West Siang, a few kilometres from here,' he said. But I still thought there were at least Minyong influences, such as the terraces that stretched beyond the roof and the poles that stood on stones rather than deep in the earth.



D. 075: Minyong/Galo community hall (*dere*), Logum Jining – plan, sections and detail.



D. 076: Minyong Adi community hall (*dere*), Tarak – plan and sections.

The man told me he would renew soon his house in exactly the same shape and construction; the materials lay ready near the dormitories.

Towards evening we saw little village boys playing with carts, which seemed to be a popular game for them. They raced with a lot of fun on their self-built little wooden carts down the slopes in the village (P. 156). The carts were steerable, but sometimes they went wrong and one capsized at a bend. They didn't cry long, the cart was put right up and they carried on.

PASI ADI

On our way to the Pasi Adi village of Tigra, the weather was rainy and gloomy. Mr Dai, a local official, took us to the house of a friend, Mr Perme, who was at home and invited us to enter. He spoke English, which made it much easier to talk about the house and the construction. He agreed that I could make a drawing of the house (D. 077 and P. 157).

We climbed under the roof to the front veranda and entered the large living room. Here the fireplace was left of the central axis, and two small bedrooms were separated. The ground plan was similar to the Minyong, the main difference being the shape of the roof which was covered with palm leaves.

When I asked how they keep the ridge waterproof, which is always difficult with thatched covers, our host explained: 'First, a layer of palm leaves is laid in one direction, then in the other, to overlap, and so on, several times. Then the whole thing is kept together by three long bamboo poles secured with cane. Also inside, horizontally split bamboo laths are fixed at regular intervals to keep the cover together.'

The main columns were made double, one of hardwood that lasts more than a man's life and the other of a less lasting kind. The latter were gnawed by worms and beetles but could be renewed easily. The crosswise and lengthwise stiffness of the construction was formed by shores of the head columns, mostly under the platform. At least one row of columns in the length and one row in the width were shored. When I looked closely and pointed at one missing shore, he said, somewhat startled, 'Oh, maybe I made a mistake, but I'm not an architect.' I reassured him by saying that it may not be necessary at that particular place and he could always put in another shore.

Besides the roof shape, the other differences with Minyong houses were the low hanging roof over the platform, the lack of a backside roof, the back wall cover with palm-leaves and the absence of a small back veranda.

Talking about his family, Mr Perme said, 'We live here as nine people: an elder brother with wife and two children, an unmarried younger brother, two sisters (one married, she will leave) and two grandparents.'

PADAM ADI

It was raining again as we drove to Bodak, a Padam Adi village. Split in two streams, the water sprayed high, sometimes up to roof of the car. Uprooted trees lay along or over the road. Where necessary, a way was cut through. The view was splendid, with a wildly running river, rough landscape in the side valleys and the high hanging clouds.

On the road we happened to meet the headman, Mr Kolma Taying, who was willing to show us around. Over a rough metalled road we drove upwards his house (D. 078 and P. 158).

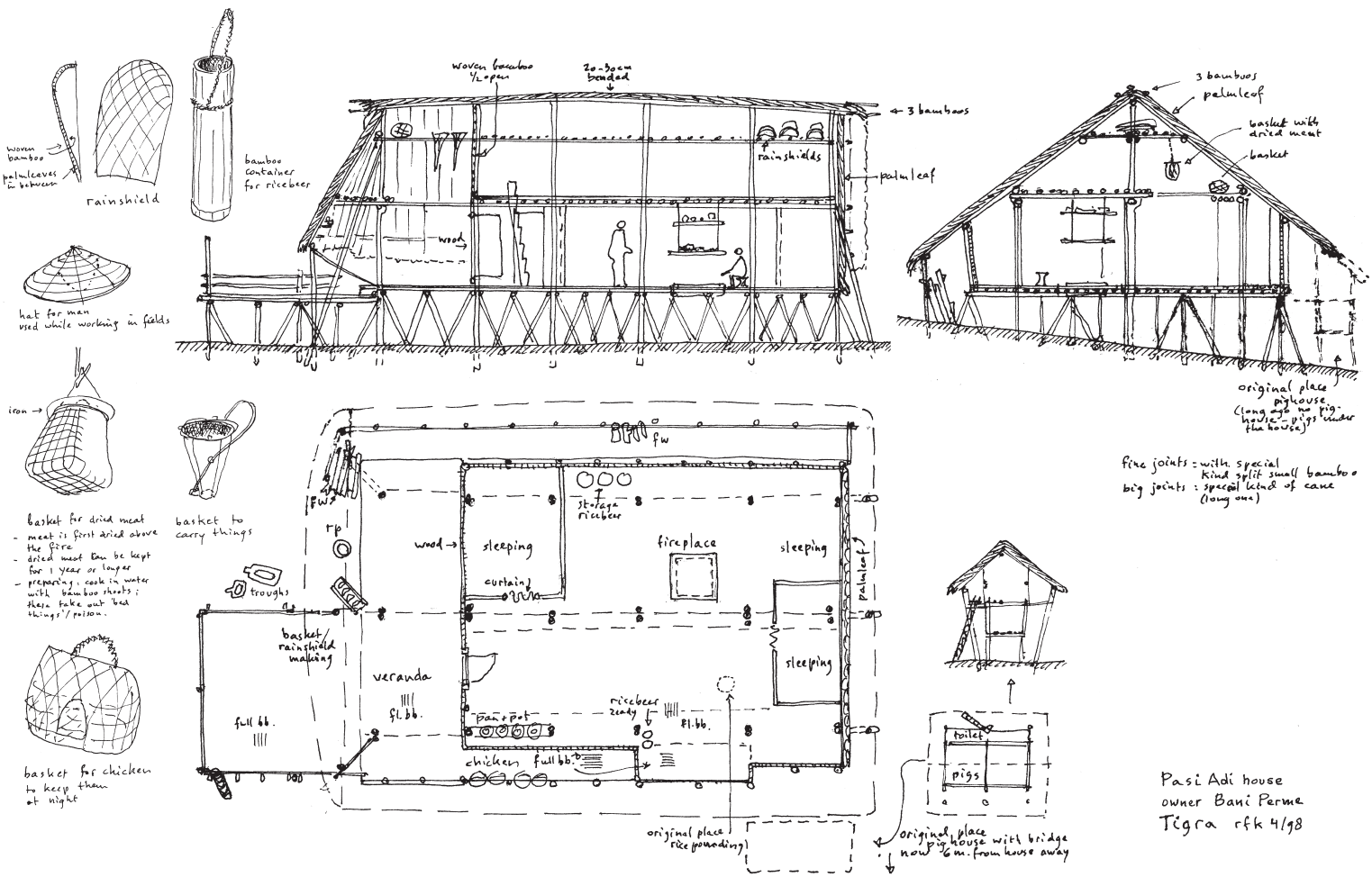
We were invited inside and sat around the fireplace in the large living room with central columns. The fireplace lay at the left of the central axis, and two corners were separated into small bedrooms. Both side walls had an opening with woven bamboo for extra ventilation. The house had a saddle-roof with hipped-like ends which were nearly vertical.

The house was inhabited by one family of eight persons. The headman told me, 'This week the house will be renewed. In principle the same shape and type of construction will be kept. All the materials are ready inside the community-hall. I expect building the house, with the help of seven to ten persons, will take three days.' A daughter, who lived in faraway Pasighat, had already come, and they were waiting for reasonable weather.

The second Padam village we visited was Damroh, situated high in the mountains and with a beautiful view over the valley. The houses were traditional although some had metal-roofs. It struck me directly that the roof was rounded at both sides, which was different from Bodak.

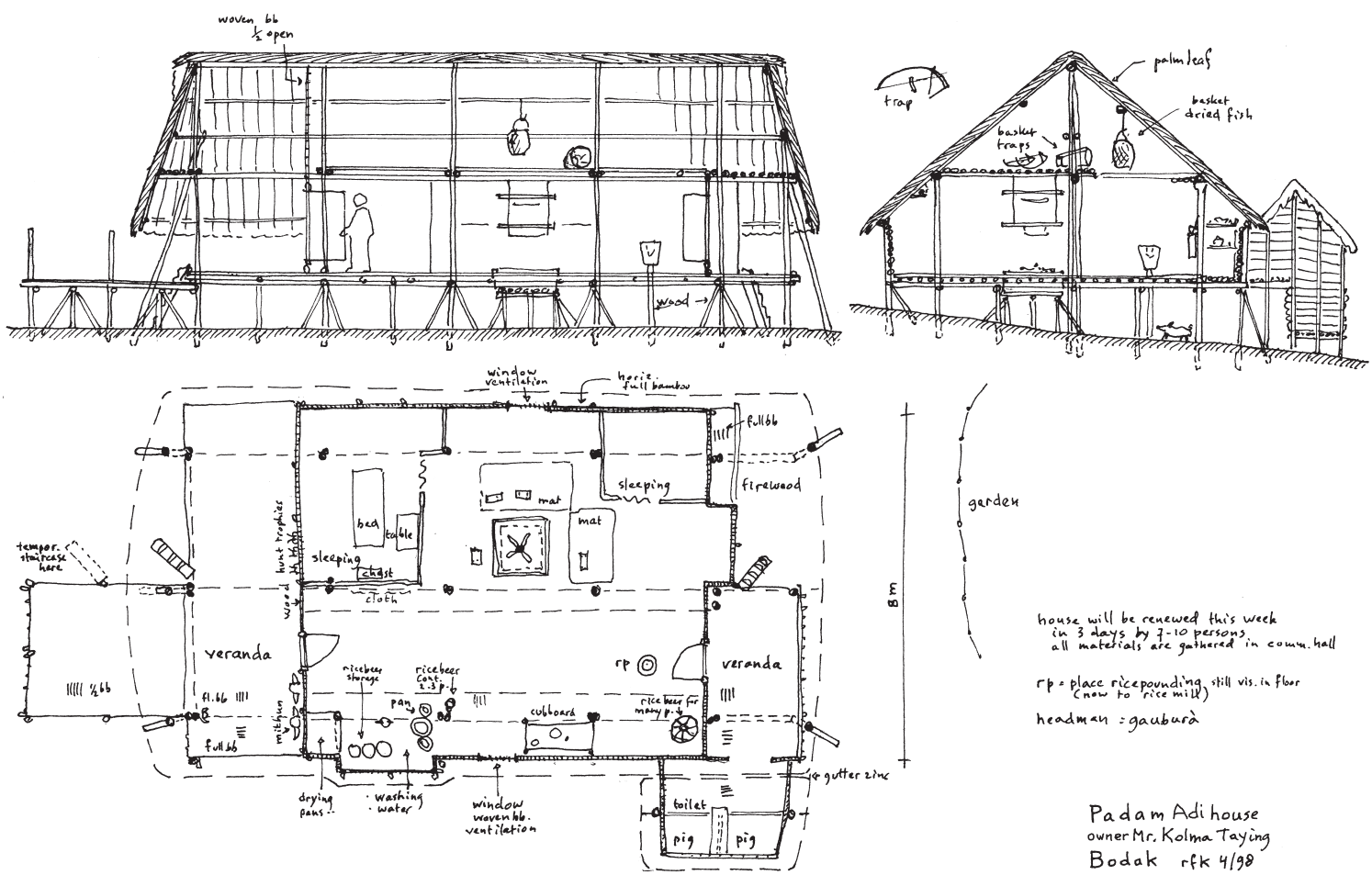
The boys' dormitory (*moshup*), which we had come especially for, appeared to have been renewed (D. 079, right-hand part). There were two buildings in a line. The second belonged to another part of the village, and a *rasheng* or dormitory for girls did not exist. For the past 15 to 20 years they hadn't slept in dormitories, which were used only as a meeting room for the village council and for ceremonies, feasts, etc.

P. 157: Pasi Adi house in D. 077, Tigra, 1998.

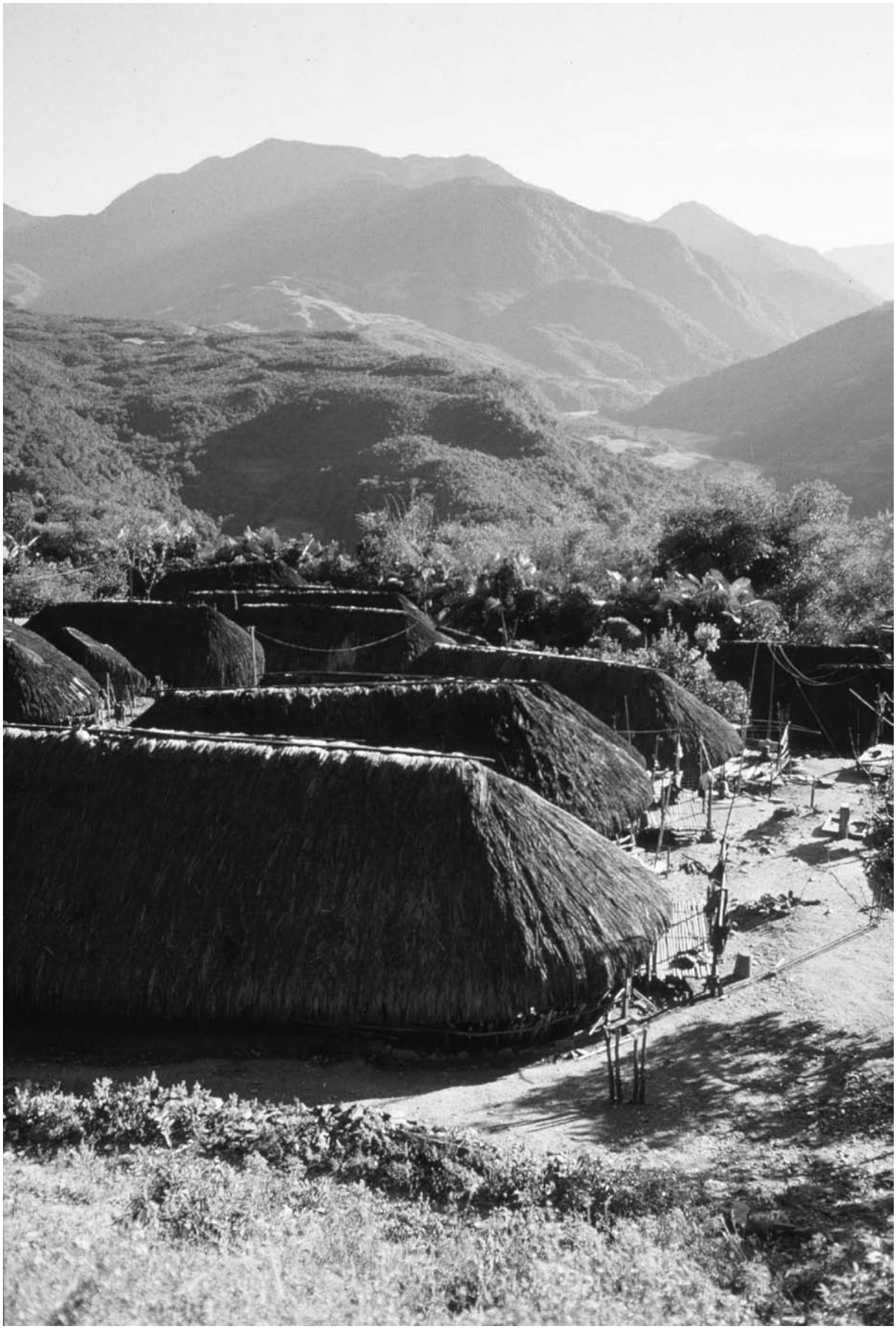


D. 077: Pasi Adi house, Tigra – plan, sections and utensils.

P. 158: Padam Adi house in D. 078 (at the right), Bodak, 1998.



D. 078: Padam Adi house, Bodak – plan and sections.



P. 159: Padam Adi houses and view over the valley, Damroh, 1999.

Climbing a small staircase, we entered the veranda and then the hall, which measured about 4 × 20 metres and contained six fireplaces. At the wall behind each fireplace hung hunting trophies and skulls of sacrificed animals. Each clan had its own fireplace and trophies. The construction followed the bungalow and framework principles, in the modern way of building.

The traditional houses here looked wonderful with their rounded roof-ends (D. 079, left-hand side and P. 159). Resembling tufts of hair, the low overhanging roofs were made of a special material, the beaten and dried fibres of the wild banana tree-trunk. This material lasts more than 12 years, they told us. The ground plan was similar to that of other Adi houses, including a large living room with one fireplace, a veranda with entry staircase and space for the cow under the front roof, a terrace that extended from the veranda, and a narrow back veranda with pigsties under the back roof.

Leaving the village we followed a dirt track along the slope. From a high point we looked back on Damroh, whose houses looked like the backs of pigs, side by side in an open place in the jungle. Far below the Yamne River flowed swiftly, and in the distance snow-covered mountains were visible.

The third Padam village we visited was Kiyit. It lay in a low, flat area and had about 160 houses, some shops and a playing field. They didn't have a dormitory anymore because many villagers had converted to Christianity.

A kind, English-speaking shopkeeper took us to a friend, who was willing to show us his house. It was built on a platform, 20 metres long and 6.40 wide (D. 080). The roof was rounded at both sides, as we had seen in Damroh but different from Bodak. Another difference with Bodak was that many things were in reverse: front-terrace and entrance were at the left side and the fireplace lay at the right side.

Climbing onto the front veranda, we saw the ritual place with skulls of mithun and boar. Above the entrance-door hung a stone in a small bag to keep out evil spirits. The door, complete with turning-points, was hewn out of one piece of wood. The whole house was large, systematically planned and solidly constructed. It was three years old and was rebuilt every five years with all the wooden parts (columns, planks and door) reused, while all the bamboo parts and the jungle grass roof-cover were renewed. About 20 people lived in this house, we were told: a man, his wife, two sons with their wives, another son, a daughter and eight children.

In Pasighat, we got some answers to the differences we had seen in the houses. A Padam man from Damroh explained that in a Padam or any Adi house some things were essential: front door and back door in one line and to the side of the central axis; and on the other side of the axis the fireplace and the sleeping place for the head of the family.

PANGI ADI

Driving along the Siang River south of Yingkiong, the landscape was thrilling with a wild stream and masses of rocks and peaks—all this against a background of high mountains with steep and densely overgrown slopes and landslides. To the north far away, snow covered tops were visible.

In Komkar, a Pangi village, linked to Geku, the granaries and some houses had beautiful carved wooden poles under their platforms. The houses were mainly of the same type as in Geku, although the platform here was more or less double, because the earth under the house was held in place by a stone wall.

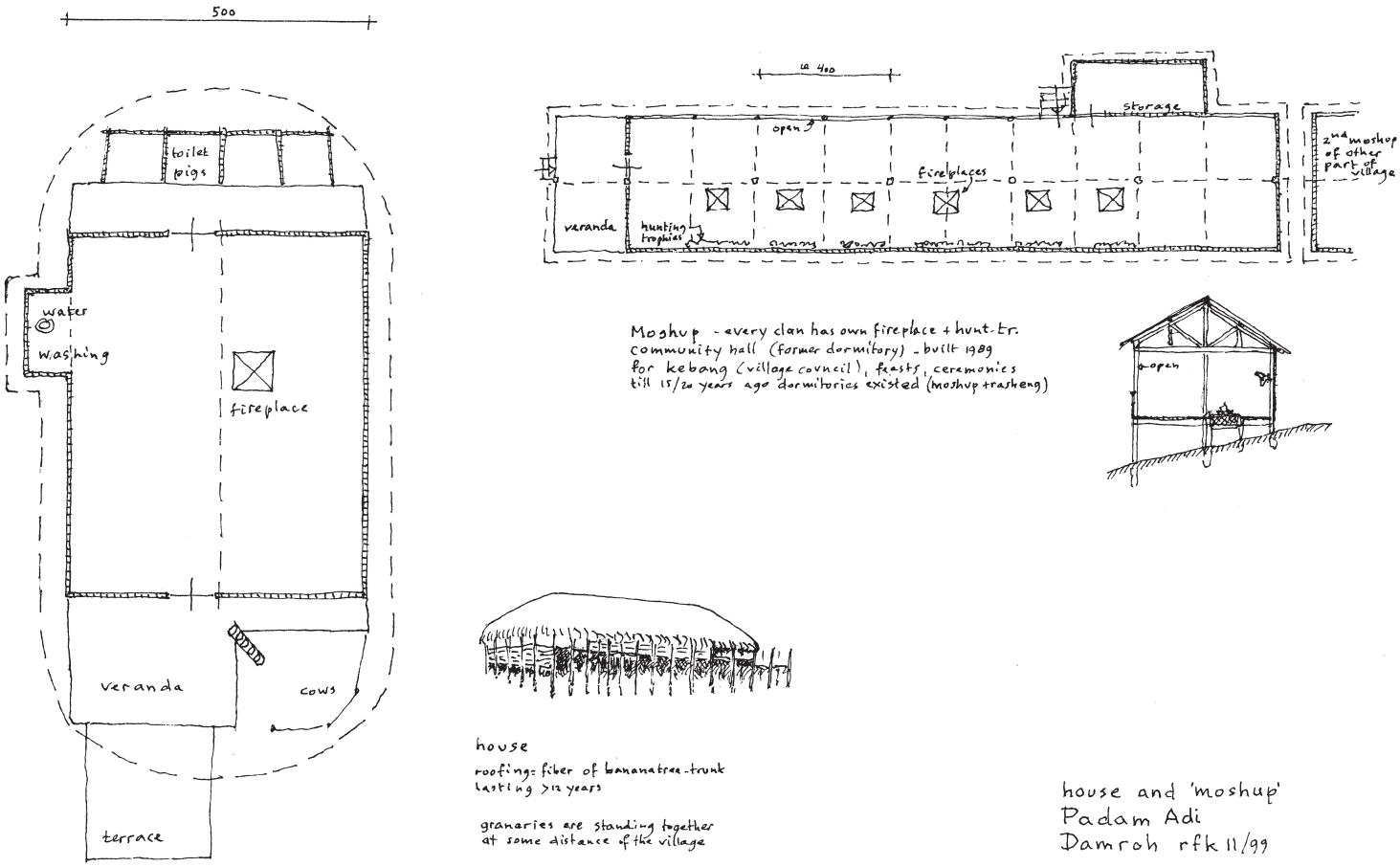
Asking if we may look inside, we were denied at the first house but succeeded at the second. A grey-haired lady sitting on the terrace had no objection. I took a short look inside the house and made a drawing (D. 081 and P. 160). To take a photo I had to wait until she had put on her necklaces.

The house looked quite similar to the Minyong and Padam ones we had seen before: a large, nearly square living-room with one fireplace, a big veranda at the front with an extended terrace outside. At the back there was a small separate bedroom and at the left side a small corridor led to a pigsty behind the house. The roof went down at three sides and ended vertically at the back. Palm leaves were used as roof cover.

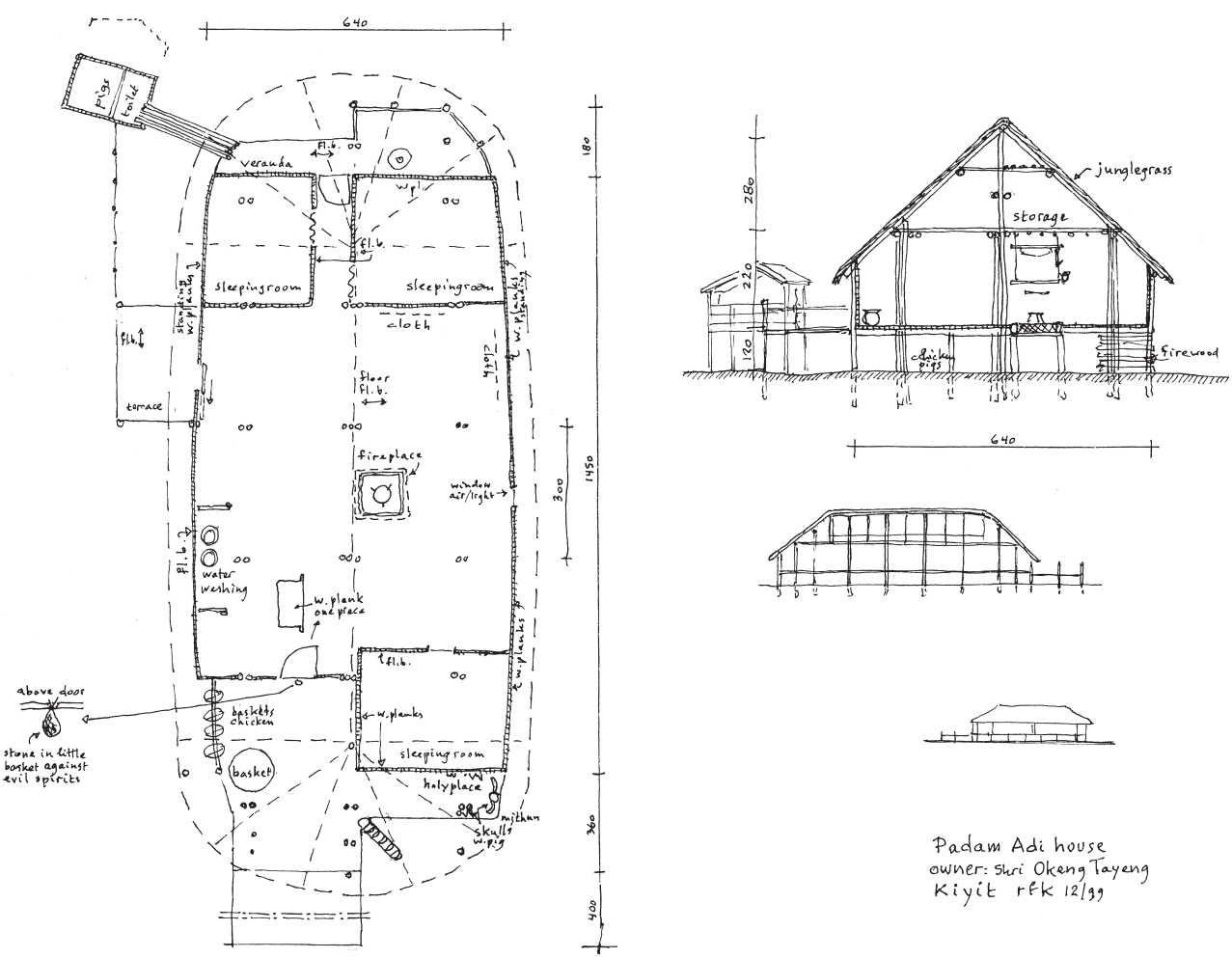
The differences with the Minyong and Padam houses were mainly the horizontal earth level underneath, the hourglass-shaped poles under the house, the roof-end at the back and a somewhat simpler main construction.

KARKO ADI

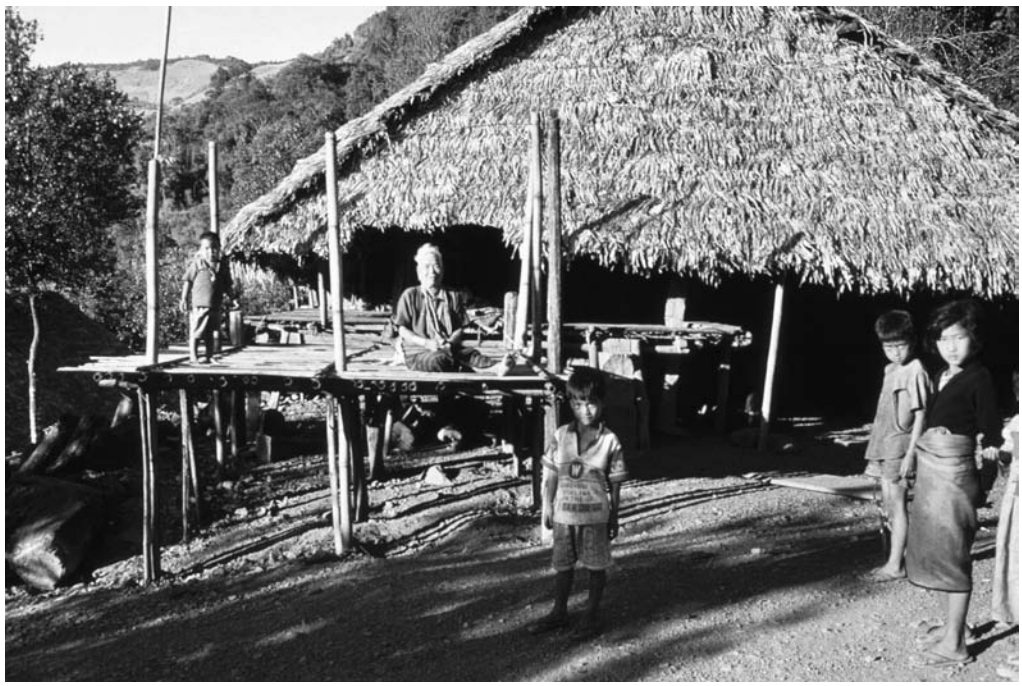
At the other side of the river we visited Karko, a village which gives its name to another sub-tribe of Adis. The village had two parts, a lower and upper Karko. In lower Karko, most traditional houses had roofs rounded at the front side and vertical ends at the back



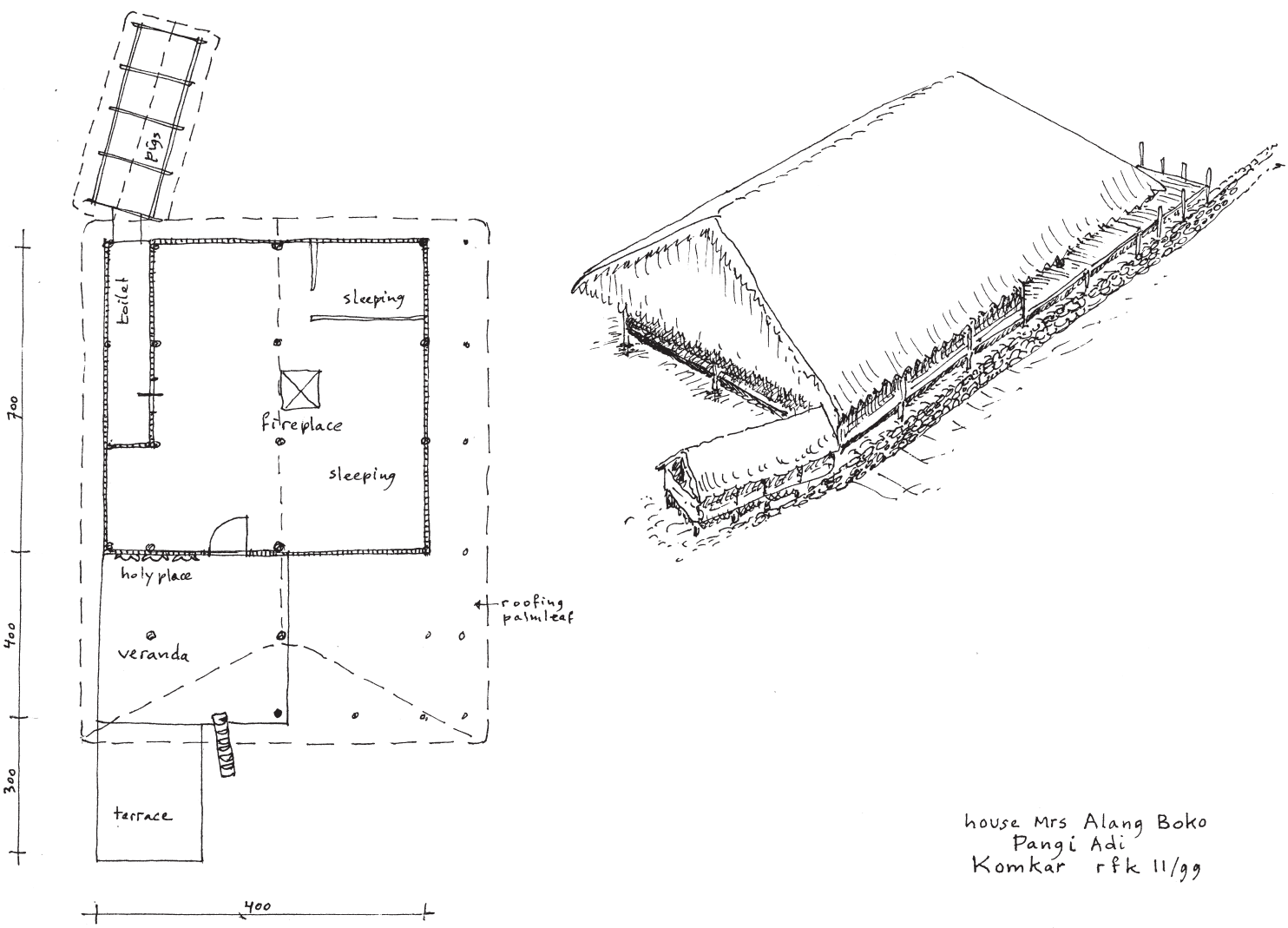
D. 079: Padam Adi house and community hall (*moshup*), Damroh – plans, section, view.



D. 080: Padam Adi house, Kiyit – plan and sections.



P. 160: Pangi Adi house in D. 081, Komkar, 1999.



D. 081: Pangi Adi house, Komkar – plan and view.

like Pangi houses, but some also were rounded like those in Padam villages. The same thing was true of the granaries. Small houses sometimes had no outside terrace.

We asked people if we could see a house, but they were in a bit of a hurry. They told us that the father of the former Chief Minister (who came from Upper Karko) had died, and today the funeral and the reception would be held in Upper Karko. We had met the former Chief Minister twice in 1998 and felt we also had to go to the reception.

An older lady who stayed at home invited us onto her veranda. She opened her door to let us have a look inside and then continued her work, drying rice on mats in the central square. I made a drawing of the house (D. 082 and P. 161), and at the first sight it looked very much like a Minyong house. It had a large living room with one fireplace, a front veranda and extended outside terrace, which was missing from some other houses here. Under the front roof beside the veranda staircase was the place for pounding rice and keeping cows and chickens at night.

The big back bedroom was probably a later extension. The walls of the house were of wooden planks, although the bedroom used flattened bamboo. The roof cover was made of cane leaves, split down the rib and dried in the sun. By splitting cane leaves in this way, one got stalks with half-leaves at one side, which was handy to use as a kind of panel when the roof was covered. Granaries were built outside the village because of the danger of fire. They were supported by wooden poles with pyramidal pedestals and, under the platform, big round discs to protect against rats and mice. On the veranda, under the roof, the removable staircase could be put away (P. 162).

In upper Karko around modern house of the former Chief Minister's parents, there was a big crowd. We were received on the wide veranda, where we sat down. The former Chief Minister greeted us cordially, still remembering our meetings nearly two years before. He said he had been in a meeting with the Indian Prime Minister when he got his son's message about his father's death. He had come at once by plane and by car, and now all kinds of rites had to be performed. His father was 'more than 90 years,' he said.

ASHING ADI

Jambo was a beautiful Ashing village, high up the Siang River valley, with views downstream and upstream toward the Himalayas. The houses stood close to each other and in the direction of the slope on raised platforms. Most houses had extremely rounded thatched roofs, but some had metal roofs. At the low side, under the protruding roof, were the pigsties.

The owner of one house, Mr Tali, permitted us to look inside and make a drawing (D. 083 and P. 163). Like other Adi houses, the main spaces were a large living room and front veranda. Half of the space under the front roof end was used for the veranda with tree-trunk staircase with cut out steps; the other half was for animals. In the living room were two fireplaces, which lay off the central axis. There was just one free middle column.

The ritual place was inside against the back wall. Two pigsties were located under the roof outside at the low side of the house because otherwise the excrement would have run under the house, said Mr. Tali. He was a hunter and showed us his shotgun and his bow and arrows with poisoned arrow-heads. 'When you touch them and wash your hands afterwards the poison is not dangerous. Otherwise it is deadly,' he said.

Twelve persons lived in the house: he, his wife, his father and his mother, his grandfather (who, they said, was 102 years old), other brothers and sisters, and his four children. When I asked if he was Ashing Adi, he first said Adi, but asking again he said Minyong. I wondered if he really was a Minyong and maybe married into the Ashing village, which seemed to happen with the Adis. Or maybe he didn't want to mention the name of the sub-tribe or maybe Minyong just had higher status. His house was clearly not Minyong. To make sure, we looked at two other traditional houses in Ashing, which turned out to be nearly identical to his, except they had only one fireplace (D. 083).

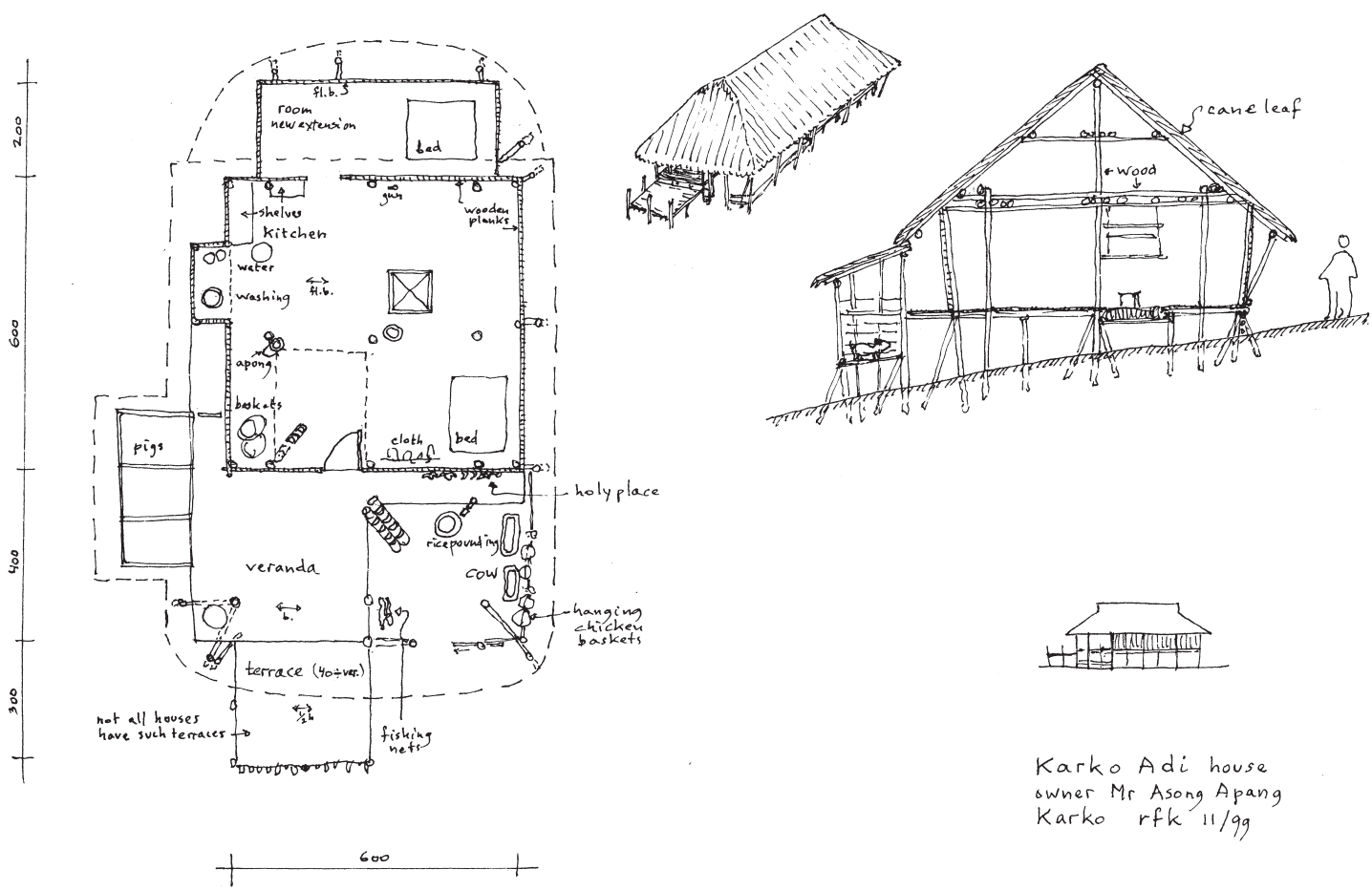
SHIMONG ADI

The last Adi group we visited were the Shimong, who again take their name from a large and important village on the upper Siang River. It had some 50 houses, about two-thirds modern and one-third traditional. I made a hasty drawing of one house (D. 084 and P. 164). The house looked in the main like the Karko and Pangi houses, but it had a different back façade covered with palm leaves.

It was raised on a platform and had a rather small living room, about five by five metres, with one fireplace. The semi-circular front veranda and terrace had space for cows and chickens at night, as in Karko. The pigsty was on a side veranda, and the granaries were some distance from the village.

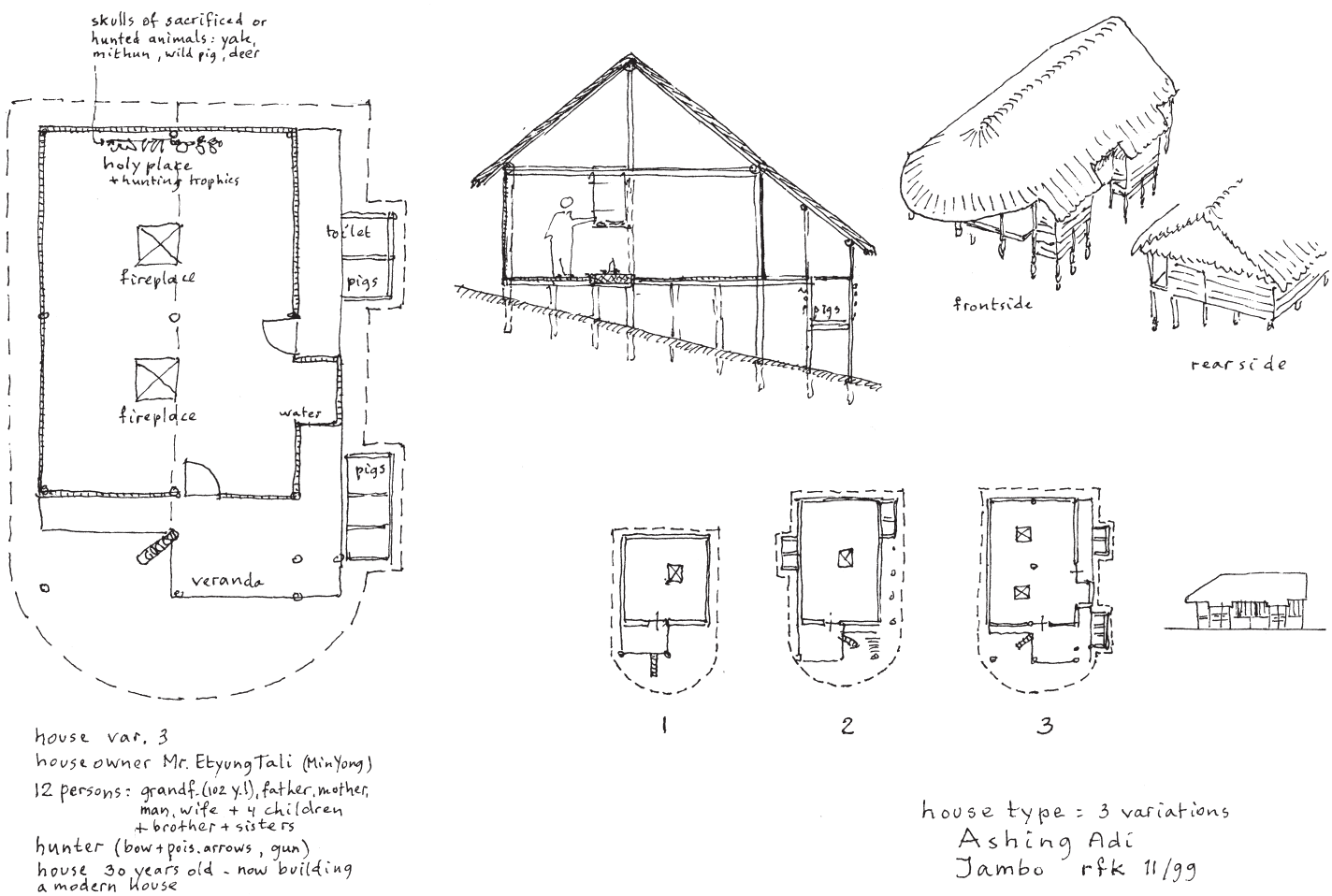
P. 161: Karko Adi house in D. 082, Karko village, 1999.

P. 162: Karko Adi granaries, Karko village, 1999.

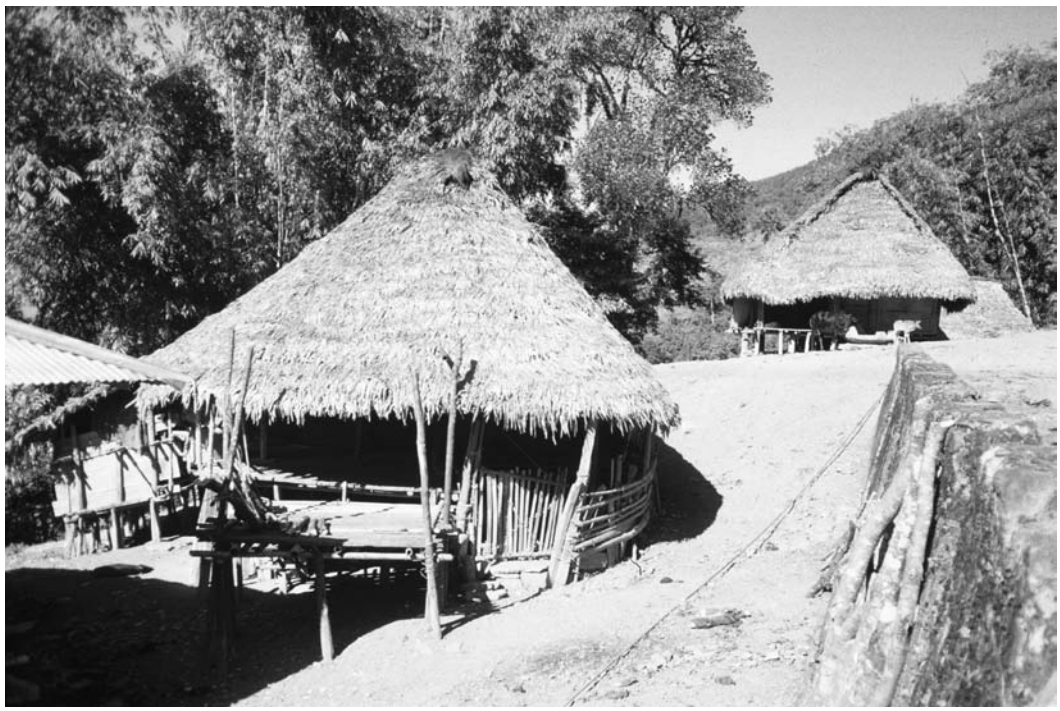


D. 082: Karko Adi house, Karko village – plan, section and view.

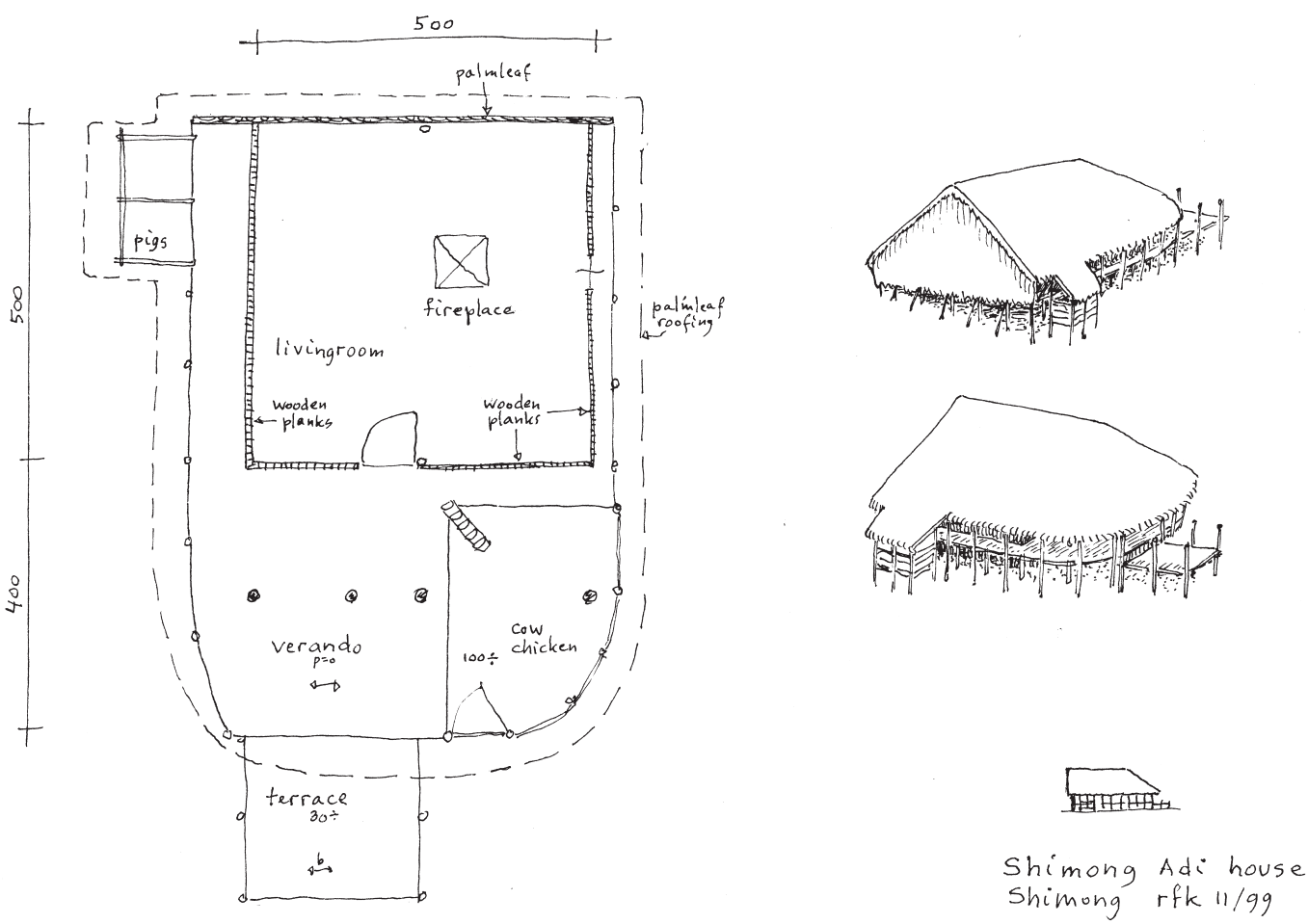
P. 163: Ashing Adi house in D. 083, Jambo, 1999.



D. 083: Ashing Adi house, Jambo – plan, section, view, 3 variations.



P. 164: Shimong Adi house in D. 084, Shimong village, 1999.



D. 084: Shimong Adi house, Shimong village – plan and views.

MEMBA

Overview

Memba houses are a square type on a raised platform on posts, and usually for one family. They consist of a veranda and three rooms, one for entry and storage, the second for living and cooking, and the third for sleeping and house altar. The houses are built of wood, while the roof has a cover of palm leaves.

Commentary

After an already long and difficult drive upstream along the Siang River, it became dark at 4:15 p.m., so dark we could see nothing and still we had two more hours to go. We drove along cart-tracks, through mud, through mithun gates, across a river bed, over a bridge made of tree trunks and branches, and finally over a new steel frame bridge. Suddenly there were bungalow type houses nearby and low mountains vaguely visible against the night sky. We had arrived in Tuting.

Next morning we looked around this administrative centre. The many bungalow-type houses made it kind of a modern village. One wondered how everything had been transported when there was no road connection. And even if there had been roads, one couldn't imagine how trucks with building materials and furniture could have made it over the bad road. Sushil said that everything in the Inspection Bungalow, its modern tiles and bathrooms, had been brought in by helicopter.

Tuting lies on a high plateau in the Siang River valley, which is very wide at that point. Looking down from our veranda, we saw groups of small Buddhist prayer flags on poles—that indicated a Memba village. The summits of the mountains on the other side of the valley were wrapped in haze, which hung over the valley like rags. The densely wooded slopes contrasted with the morning sky. Light spots in the clouds showed where the sun stood. We heard cocks crowing, children's voices, carpenters at work and in the background the rushing river.

The Survey of India map shows the height of the surrounding summits at 3,000 to 4,000 metres, rising to almost 6,000 in the distance, about 40 kilometres away across the Chinese border. The nearest point to the border is 15 to 20 kilometres from here, but there was no road connection with China. There were only footpaths, which long ago were used for barter with the then-independent state of Tibet and some of which were still in use.

A policeman was sent to be our guide because he knew Memba villages. 'Memba or Khamba, they are the same,' he said dismissively. We descended to the village of Pekong on the lower plateau. These Membas came here from Tibet, he said, some long ago, others 20 or 30 years ago.

In the centre of the village was the *gompa*, or Tibetan Buddhist temple-monastery, a simple stone building consisting of a big hall with a front porch. The window frames were ornamented with refined wood-carving, like we had seen in Tawang. Around the front square stood a real forest of tall poles, more than ten metres high, with long strips of cloth printed with prayers. They looked like enormous feathers stuck into the ground (P. 166).

We planned to have a look at three of the most traditional houses. At the first one we met the owner, who lived alone and sometimes together with his brother. He worked for the government, while his brother was in the army. He said the house was 18 years old (D. 085 and P. 165). It was a kind of log-cabin with the wall planks crossing each other at the corners and a roof covered with palm leaves. The wide veranda at the front was reached by a small staircase. A porch led to a big living room with a fireplace and kitchen corner; there was also a side room with an altar.

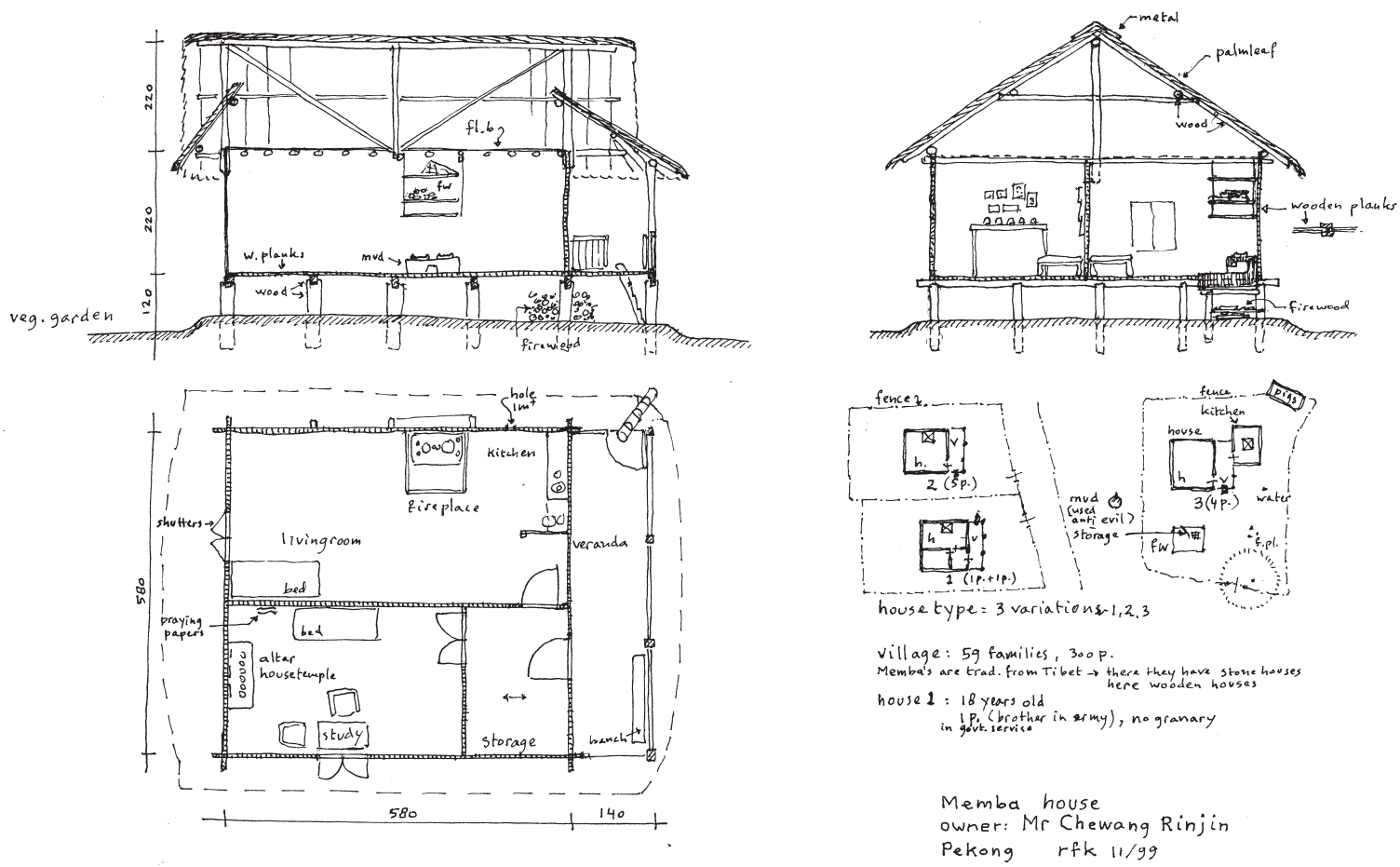
The second house was basically the same but had no partition in rooms. Five persons were living there: husband and wife, his mother and two kids. Both houses were surrounded by a fenced yard, partly used as vegetable garden.

The third house looked identical to the second one, but it had a separate kitchen with fireplace bordering on the front veranda (P. 167). A separate pigsty and a shed for firewood storage stood in the yard. We greeted the woman on the veranda who sat knitting, and she showed us that the shed functioned also as a workshop where religious conical objects of clay

(called *tsas*) were made 'to avert evil.' Earlier we had seen these objects on the beams extending under the roof of some houses.

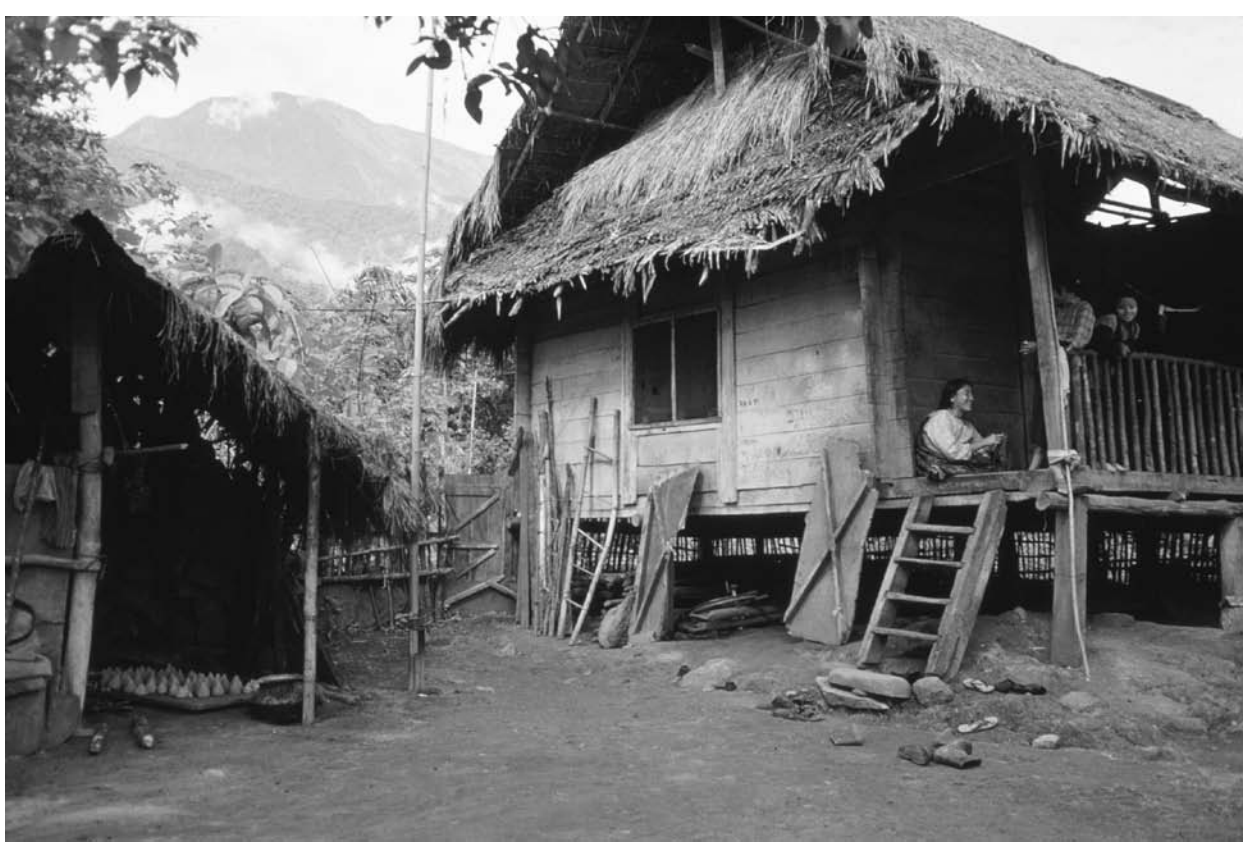
Nearby men were starting to build a new house. Using a measuring-tape, they had placed bamboo poles at regular intervals to mark where the wooden posts would later be driven into the ground. A well-known modern method. The sawn wooden beams lay ready.

P. 165: Memba houses (2 + 1 in street plan in D. 085), Pekong, 1999.



D. 085: Memba house, Pekong – plan and sections, 3 variations.

P. 166: high poles with banners of Buddhist prayers, Pekong, 1999.



P. 167: Memba house (3 in street plan in D. 085), Pekong, 1999.

KHAMBA

Overview

Khamba houses are usually one-family, square and on a raised platform on posts. They consist of a veranda and a closed part with several rooms. The simple house has two rooms, one for living and cooking, the second for sleeping and the house altar. The larger house has a living room, three sleeping rooms, one room for the house altar and a separate kitchen. The houses are built of wood, and the roof has a cover of corrugated iron sheeting.

Commentary

On the high plateau of Tuting we walked along a footpath upstream of the Siang River, sometimes descending to cross a brook. Buddhist prayer flags fluttered on long poles above the hill. Then we visited the Khamba village of Lali, or Lali Basti (*basti* is Assamese for 'village'). The fenced yards around the houses were partly used as vegetable gardens. We heard that houses in this village differed from those the Khambas built in Tibet.

We visited a house built on a platform, with an old couple and their family, in total ten persons over three generations. The man's name was Thrassi Thobje, and he kindly showed us his house and surroundings (D. 087 and P. 169). Nearly the whole building was made of wood, while the roof was covered with corrugated metal.

A long veranda formed the entrance to the central living room, into which three bedrooms and a prayer-room led. The latter was provided with an altar and a writing-table. The free-standing kitchen had its own veranda connected at a right angle to the house veranda. The house was comfortable and had been built with great care.

In a yard behind the house was the village *gompa*, or Buddhist temple-monastery, a small wooden building with a veranda and one room with a statue on a pedestal. Tens of prayer-flag poles stood in a half circle around the building.

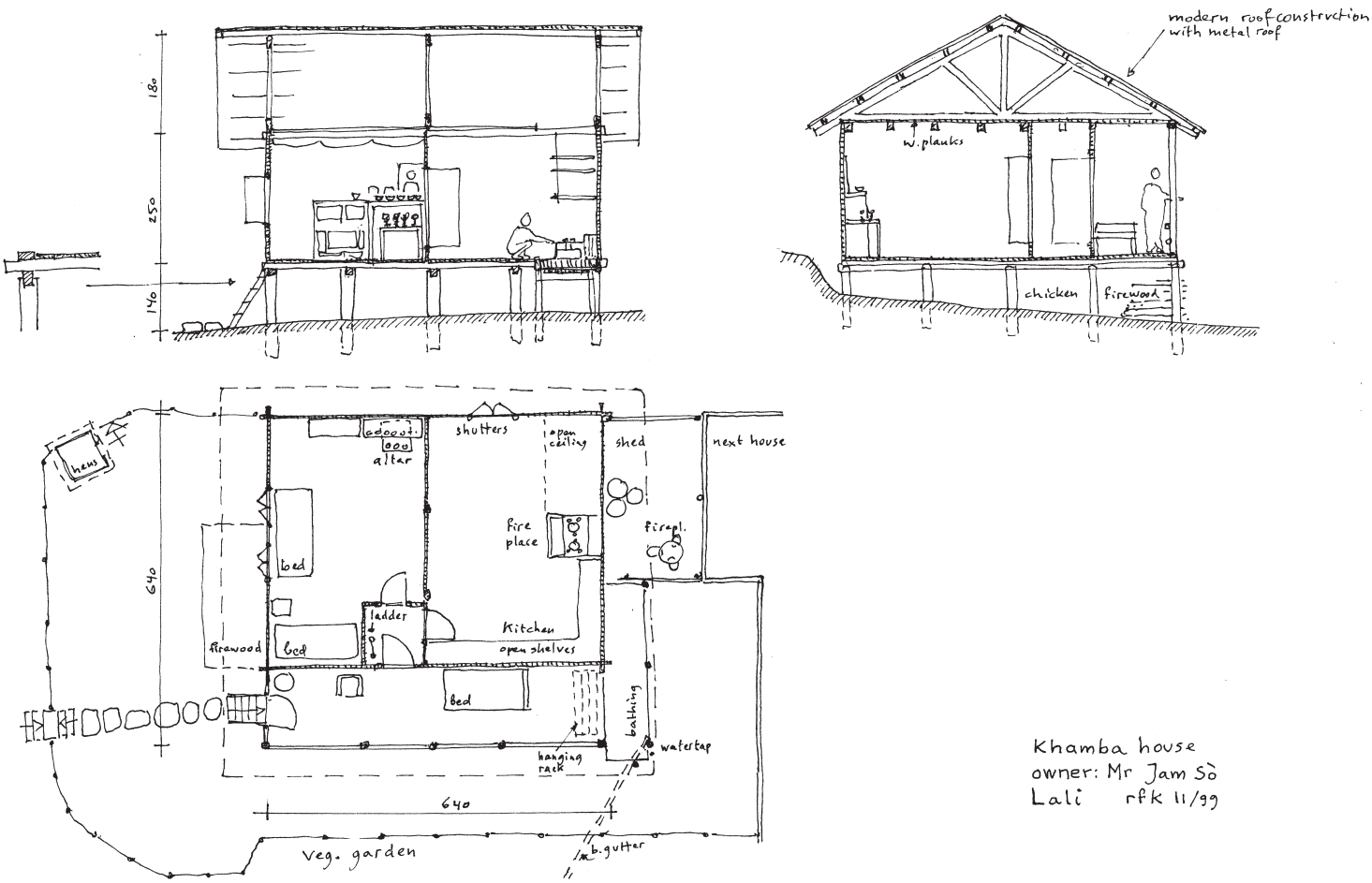
Another Khamba house we visited (D. 086) was inhabited by an older couple without children. The yard was much smaller than the yard in the first house. The man's name was Jam So, who worked for the S.I.B. (Special Intelligence Branch). This wooden house built on a platform was traditional, they assured us. It had a metal roof, a veranda, an entrance porch and two rooms, one with fireplace and kitchen, the other with an altar and two beds. It looked very much like the first Memba house we saw in Pekong (D. 085).

In a yard close by men were busy building a new house. The platform poles stood in the earth already, and the men were fixing the floor-beams of sawn wood.

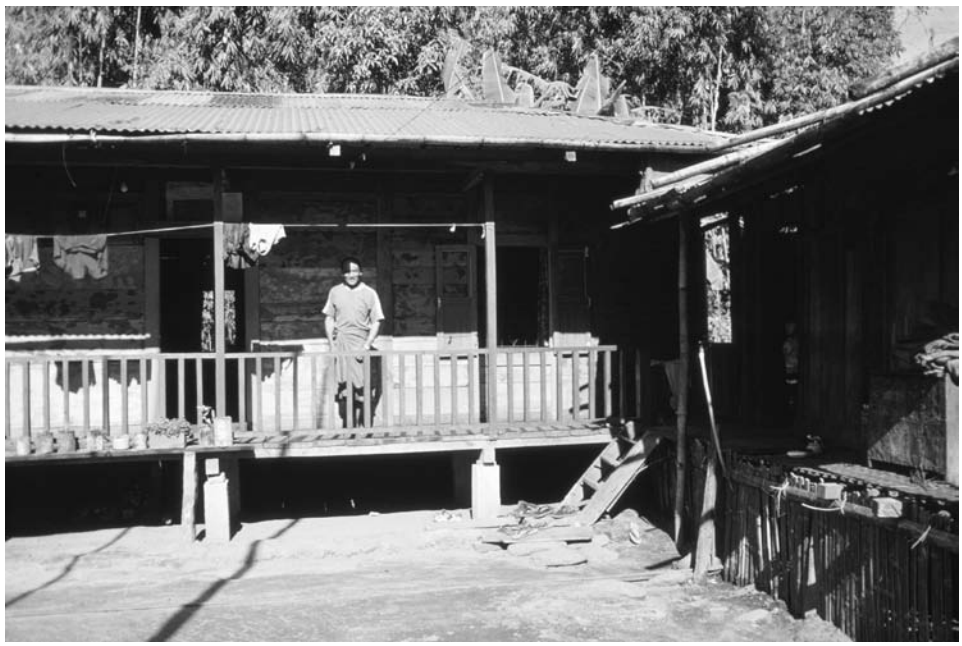
Along a cart-track through a rough field we reached the riverbank at the place where a long cane-bridge hung high above the river (P. 168). The floor of the bridge was crooked, and the planks one walked over didn't fit well. Gaps of nearly a metre yawned here and there.

At the other side of the river was another village that I wanted to visit. I stepped on the bridge and took a few steps, but after ten metres everything started swinging and rolling, and it was getting too risky. Mothers with a child tied on their back, and even women with baskets full of firewood, went across easily. They were accustomed to it, of course.

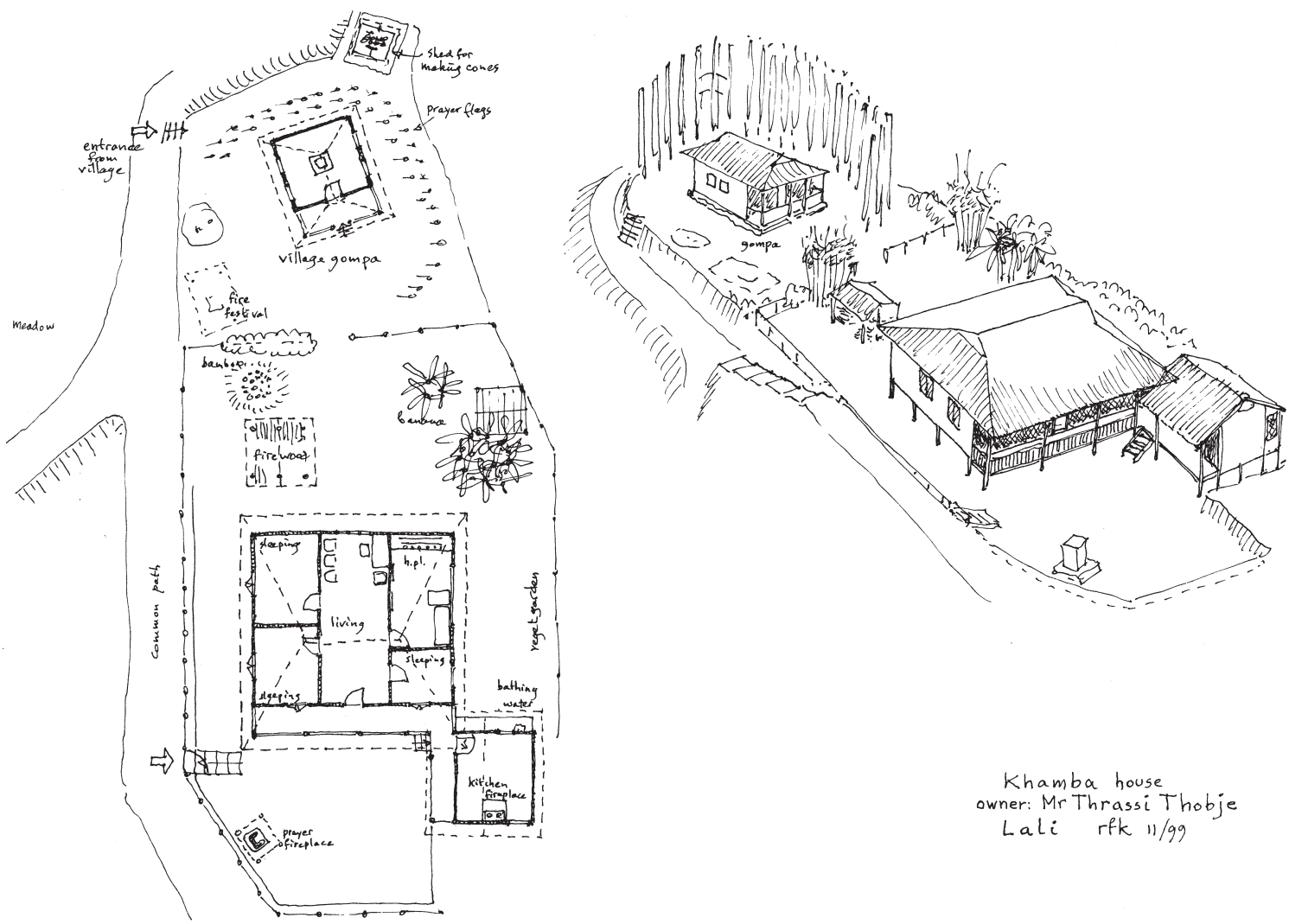
P. 168: cane bridge, near Lali, 1999.



D. 086: Khamba house, Lali – plan and sections.



P. 169: Khamba house in D. 087, Lali, 1999.



D. 087: Khamba house and monastery (*gompa*), Lali – plan and view.

MISHMI

Overview

Mishmi houses are built on a platform on piles. They are often longhouses and have the following sections: notched log to front veranda, a long passage along a guest room, several rooms with fireplaces and to the rear a veranda. The first part of the passage is the sacred place, with hanging animal skulls and for the Idu Mishmis a place for house spirits. In the yard, near the front side of the house, the Digaru Mishmi and Miju Mishmi have an altar of the house god where rituals are performed in case of illness.

Commentary

When the road stopped abruptly, a 300 metre-wide dry river bed lay in front of us. We followed a track through sand and boulders. The tree-trunks washed ashore indicated that a lot of water flowed through this river in the rainy season. At the other side the small asphalt road appeared and we entered the jungle. Seeing the droppings on the way, our driver, Sushil, said, 'That means wild elephants are living in this area.'

We looked for the road to Roing, which turns off somewhere near and leads to the Dibang River, with its many tributaries and branches, which we still had to cross. This was the most difficult part of this journey. Passing a small shop Sushil asked the way, but the men looked doubtful. 'I'll try,' was Sushil's response.

A *mahut* passed with two elephants in chains. We crossed a shallow river, although some water entered the car. The climb to the riverbank went well, but the car soon slipped in the slithery clay and nearly turned on its side. We couldn't go further.

Then Sushil remembered the *mahut* and went to ask for help. The big elephant saved the car by pulling it up the riverbank to a dry place. 'The smaller younger elephant is not allowed to do heavy work yet and accompanies us to learn,' explained the *mahut*.

Mahut in tow (P. 170), we continued and came to another river. When we drove onto the ferry, one of the planks broke, but luckily we were able to reach the small boat. While we were rowed across, Sushil plumbed the depth and announced, '1.20 metres—we never could have crossed in the car.'

At the other side we couldn't get ashore because the water wasn't deep enough. The boatmen went to find more planks. In the meantime the *mahut* and the elephants crossed the river, the elephants half-submerged in the water. The planks were brought, so we drove from the boat through the water and onto a sandbank. The *mahut* thought we would be all right from there. But he said he would wait for half an hour before leaving, in case of another emergency and we need his help again.

We took a man with us who worked for the government on road construction. The track made a wide turn of one kilometre across the sandbank, the last part between high jungle-grass. Sushil drove into the Iphipani River, with a rocky bed, as the man guided us. The deepest part we came through well, but driving up to the bank, the car got stuck in a deep hole. The tires were spinning and we were just a car-length from the bank. Sushil kept the motor running, and the exhaust spluttered in the water. The man walked back to get the *mahut*.

Waiting for the elephants, we looked under the car and saw what was holding it. We removed the boulder and filled the hole with small stones. The man returned and said that the *mahut* and his elephants had gone. But some boatmen came to help us push the car. Still, whatever we tried didn't work.

After an hour, it became dark. Red coloured stripes of clouds low on the horizon showed where the sun went down. The boatmen said, 'Tomorrow morning a government truck will pass; maybe he can get you ashore.' And they warned us that before Roing we would have three more rivers to cross and they were at least as deep. Then they left.

Sushil turned off the motor. The question was, would it start again tomorrow with the exhaust underwater? Hoping it would help, he inserted a piece of plastic tube in it that stuck out above water level. On the highest part of the sandbank, 1.5 metres above the water, I cleared away the rocks and put up our little tent, brought for this kind of emergency. We took our baggage out of the car; it was not unthinkable that the water could rise from rain in the moun-

P. 170: helped by elephants while crossing a tributary of the Dibang River, 1999.

P. 171: crossing rivers, car in river and sandbank where we passed the night, Iphipani River , 1999.

tains. We made a big campfire; wood was plentiful. It was pitch-dark. Far upstream we saw a flickering light, which must have been the boatmen's fire.

Luckily we still had a little to eat with us and we drank some whisky that Sushil had with him. He slept on a mat near the fire, while we were in our little tent, but nervousness kept us awake. And the whole night each of us in turn had to collect wood to keep the fire burning. As long as it burned it protected against wild elephants, and even tigers in this area.

Just before sunrise I collected some wood and warmed my hands above the fire. The night was cold. I had hoped the water level would be lower, but it wasn't; but at least it hadn't risen. The landscape was beautiful. In the background lilac-coloured shadows fell on the slopes of the foothills. In front, the sandbanks had straw-coloured feathers of jungle-grass. Here and there dark green bushes and low trees rose above and along the twinkling water surface. All around us were endless amounts of boulders and driftwood. The situation looked less threatening, but we were not yet free (P. 171).

We washed in the river and had some breakfast with biscuits. A man came along to say that no government truck was coming—it would only go to the road construction camp. Sushil decided to go to the camp and try to get to Roing and come back with a truck with a crane or something.

We waited. With branches and a mat we built a screen that created shade so I could work on my drawings. At midday we saw an elephant coming, with two men sitting on top, the *mahut* and behind him a person whom we recognized as Sushil.

For one hour we tried everything, pulling and pushing. Finally, the elephant lifted the car with its tusks and moved it two metres forward! Now, with chains and pulling, we got the car ashore. It was unbelievable, not just the power but especially the intelligence of the elephant: how it worked, the way it wound the chains around its tusks and trunk to get a grip.

Beyond Roing, we went into the mountains, where the road was interrupted many times by landslides. Sometimes the whole road had disappeared and a way had been made through the debris.

We reached Hunli, a small Idu Mishmi town with a Police Station, bungalow type houses and also, I saw immediately, a few traditional houses. Along the road we met a young man whom we asked to be our guide. He was on his way to Roing, having already walked 20 kilometres from his village. He explained that Hunli had about 30 houses and only five were traditional. He had a friend in one, with three fireplaces.

We followed him down along a narrow footpath to a longhouse, which stood on a high platform (D. 088 and P. 172). It was more than 30 metres long and about four metres wide, a bit narrow in fact. We were allowed to look inside. Under the overhanging rounded front roof, which had a beautiful fan-shaped construction and was supported by one pole, we climbed up a few steps to the veranda and went through the front door.

The first room had a fireplace and against the wall a ritual place with skulls. The second and third fireplaces were halfway and nearly at the end, respectively. In between and after them were the three separate sleeping rooms. A narrow veranda serving as an exit extended along the whole left side of the house, only interrupted by two washing places. Underneath, at the low side of the house was the space for pigs. For special ceremonies, the front veranda was temporarily extended by five metres, over half of the breadth.

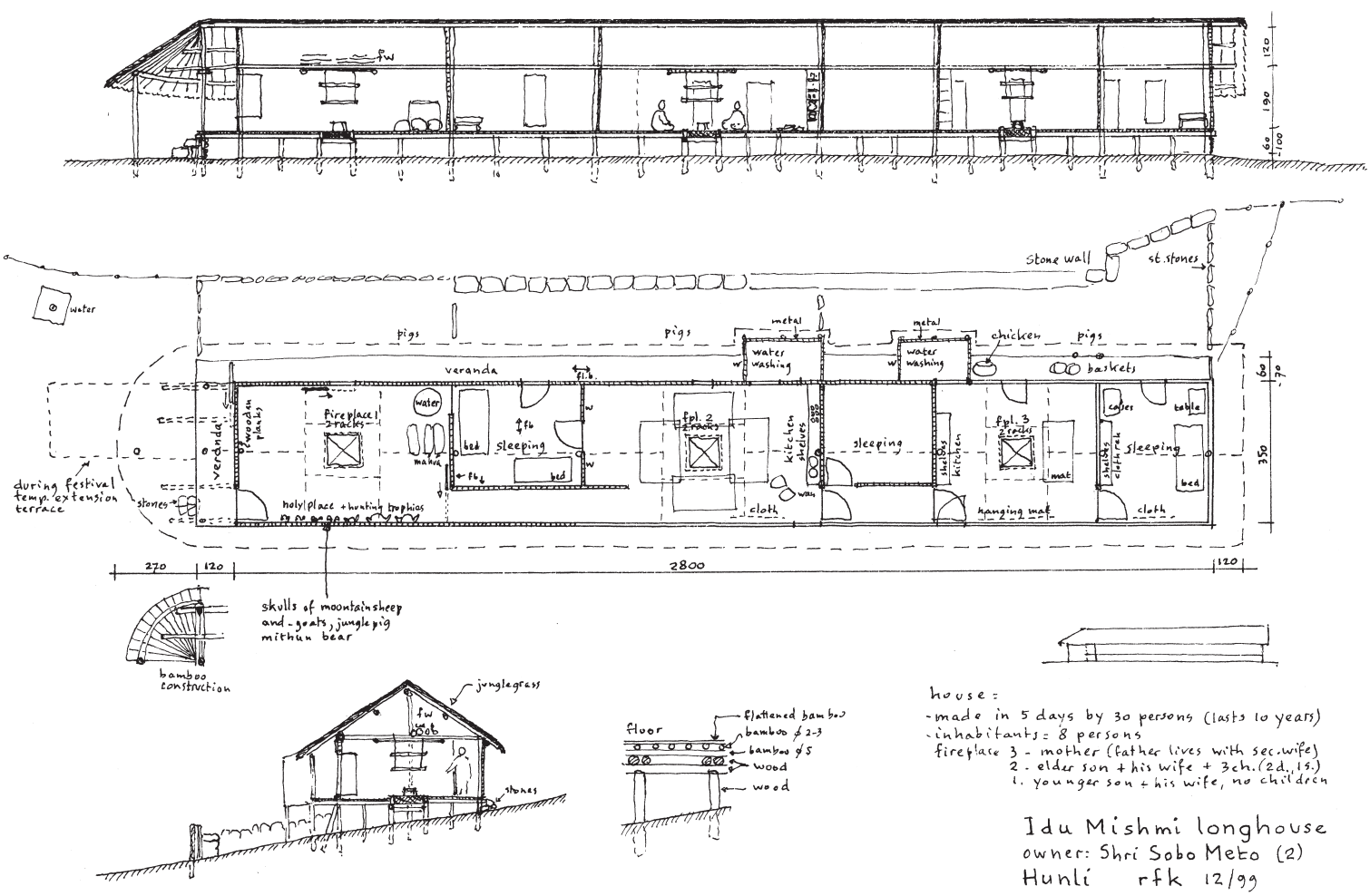
This was home to an extended family of three households: a mother (whose husband lived somewhere else with his second wife) and two sons, the oldest with wife and three children and the youngest with wife and no children. In all there were eight persons.

Returning to Roing, we headed for Digaru Mishmi territory and visited Huchailang village. It had numerous traditional longhouses, built on platforms, each with its own fenced yard at a right angle to and at some distance of the road. We saw some people standing in front of one of the houses and a stick with a white flag at the road side.

We walked along the entrance path toward the people, passing an oval fenced space with a monument, which looked like a Siva lingam, with flags on long sticks. Sushil said, 'I am afraid somebody has died.' And he was right. 'The husband of a young woman has died. Killed!' we were told. Later that week the funeral ceremony would be held. For the guests dozens of bamboo containers with rice beer were already set out.

The house looked more or less like the Idu Mishmi house at Hunli, except here the front veranda was bigger and had two front columns. The house contained three fireplaces, each in its own space and a woman said, 'There are no separate sleeping rooms.' There was only a small front and back porch. At the left side was a narrow veranda and a fenced piece of ground for the pigs, which continued under the platform of the house.

P. 172: Idu Mishmi longhouse, in D. 088, Hunli, 1999.



D. 088: Idu Mishmi longhouse, Hunli – plan, sections and details.

The house looked like it might fall over; at the right side extra slanting poles were put up to keep it upright. We had seen this problem with other Digaru Mishmi houses: they all had these extra shores at the same side. The reason seemed to be the wind which could blow very hard from one direction, and the transverse construction of the house lacked sufficient stiffness.

At the moment just four persons lived in the house. We were told that most of the houses here have only three fireplaces, but that the neighbouring house of the headman has five.

We went to the headman's longhouse, where we were introduced by the neighbours. We were permitted to look inside and I started to make a drawing (D. 090). There were only four fireplaces, and when I said I had heard there were five, they explained that 'there were five, but since the headman's parents died their fireplace is closed.'

The first room with fireplace was the guestroom, which had its own ritual place with mithun skulls and hunting trophies. Between the rooms with fireplaces were sleeping rooms and for the headman a reception room with chairs and a divan. The front veranda was identical to the first Digaru Mishmi house.

The narrow side veranda had been partly added to the sleeping rooms, and the narrow porches at front and back were missing. This house also had no extra shores outside. It was too dark for taking pictures, so we made an appointment with the headman to come back the following day.

The next morning at 9 o'clock we returned to the headman's house, where I noted some more details. The headman, Mr Tamai, said, 'The next village also has a big longhouse, the headman's house.' We said we wanted to visit and one of the boys was told to accompany us as a guide.

When we got to Loliang, the headman, Mr Khogen Boo, was just leaving on his scooter for Tezu to buy diesel for his tractor. When Sushil offered him to give him 20 litres, which saved him the scooter drive, he stayed. He showed us his house and let me make a drawing (D. 089 and P. 173).

Twelve people lived there: himself, his two wives, eight children (one daughter, his ninth child, had left the house already) and his ninety-year-old father. The platform longhouse was about 36 meters long and just four metres wide. Underneath stood very thick columns, about 40 to 50 centimetres in diameter and put into the ground at a depth of some 90 centimetres. The whole construction was made of wood and bamboo, and outside were no extra shores. For the roof cover jungle grass was used.

Climbing a staircase, we entered the big front veranda under the beautiful fan-shaped roof. Two supports in the roof were specially ornamented with notches. The house had five fireplaces, each in a separate space. The first room was also the guestroom and ritual place with mithun skulls and hunting trophies. Between the second and third room with fireplaces were two sleeping rooms.

The old father had the fifth fireplace. He sat there like a king, a marvellous figure, with grooved face and a beautiful pipe in his mouth. Still sturdy and fit, he came outside for a photo (P. 174). My wife, Edith, told me later that she saw an old lady bring him a rat she had caught; rats were eaten by them.

Finally, we travelled to a Miju Mishmi village, Pukhuri, also called Old Pukhuri. We were told that this village had about 500 inhabitants and about 47 nearly identical houses, differing only in length.

One of the first houses we paid attention to looked like the Digaru Mishmi houses we had seen in Huchailang and Loliang. Only the side veranda was missing, and the construction was a bit modernized, using sawn wood. The inhabitants said, 'We use elephants to assist us. And in our village we have two longhouses, each with six fireplaces, one with a traditional roof and one with metal roof.' It was late and already getting dark so we said we would return tomorrow and have a better look.

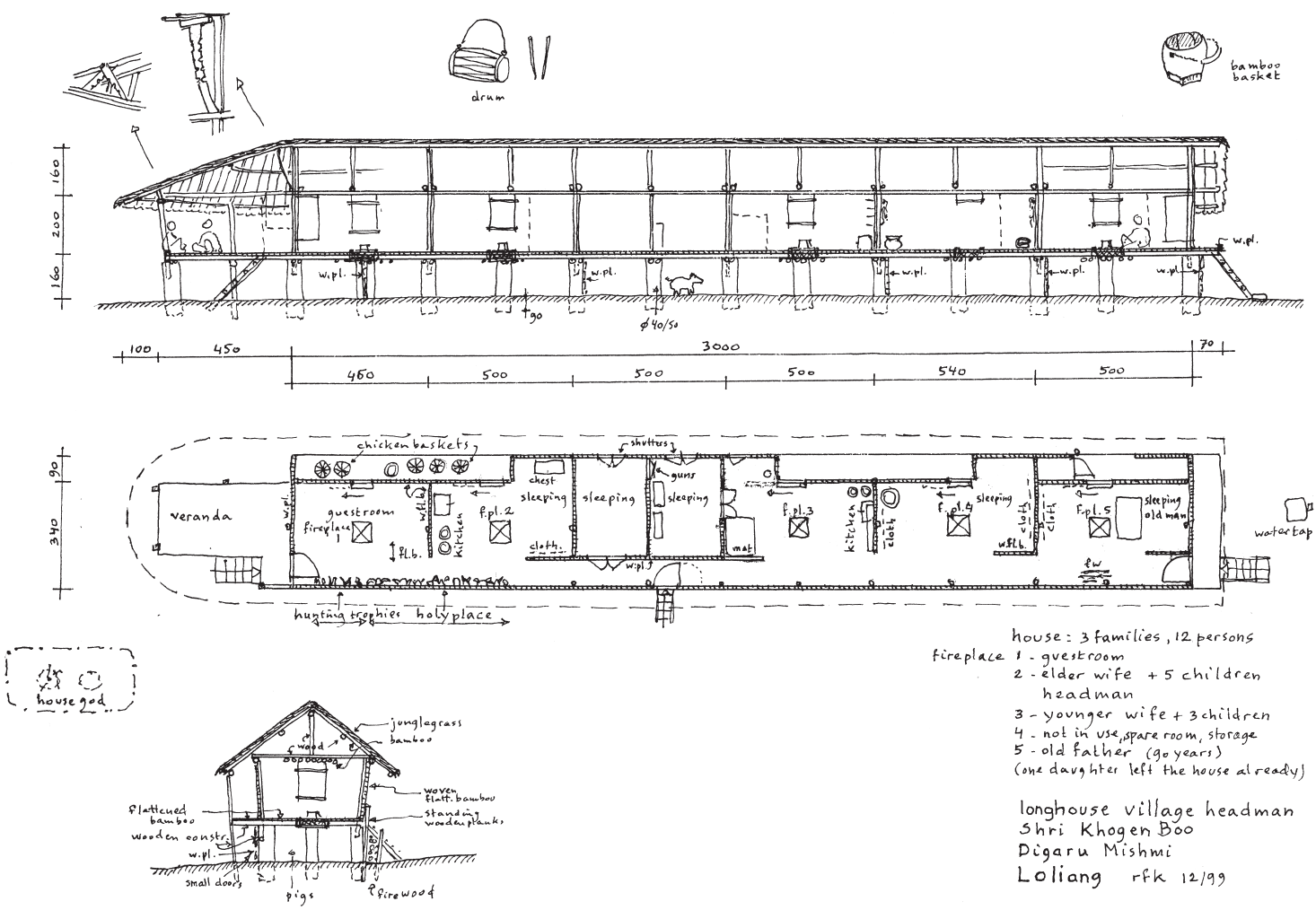
The next morning we greeted the people of the first house and then walked along to look for the traditional longhouse with six fireplaces they had told us about. It stood a bit further on and, like all the houses, situated at right angles to the village road. The house we were looking for had extra shores on the right side. Obviously they had the same problems with the wind as in Huchailang.

The owner, Mr Shri Matelum Tayang, had no objections to us looking at and drawing his house. Walking through the longhouse together, he told me that 27 people lived there: eight brothers with their parents, wives and children.

While Edith and Sushil talked with the family on the front veranda, I started my drawing (D. 091, P. 175 and P. 176). The house had indeed six fireplaces. The first was in the guestroom, the second was for the parents and the four others were for the four married sons. The other four sons were not married.

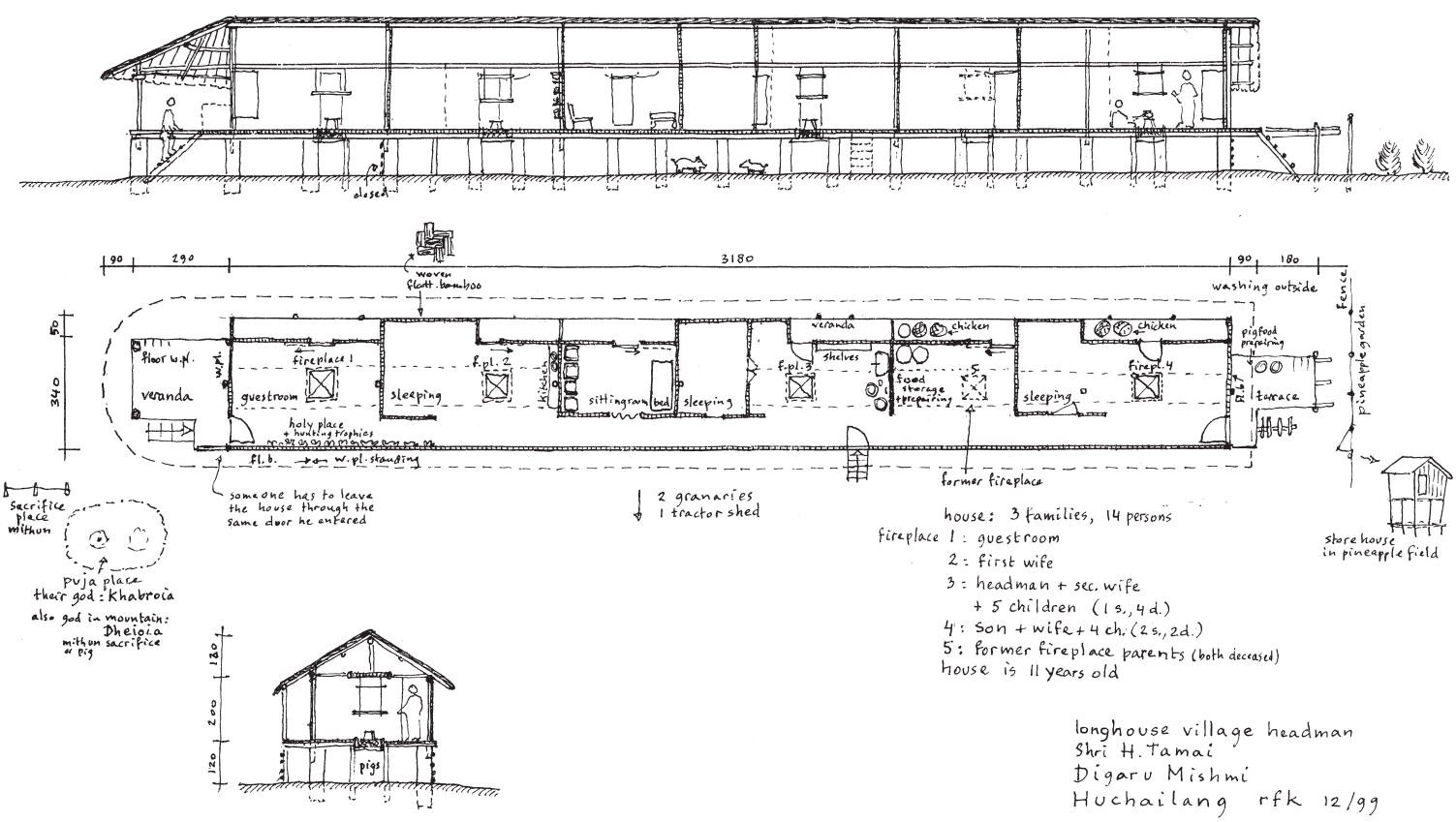
In essence this house differed hardly at all from the Digaru Mishmi houses we had seen. The variation existed only in the side veranda and a bit in the con-

P. 173: Digaru Mishmi longhouse, in D. 089, Loliang, 1999.



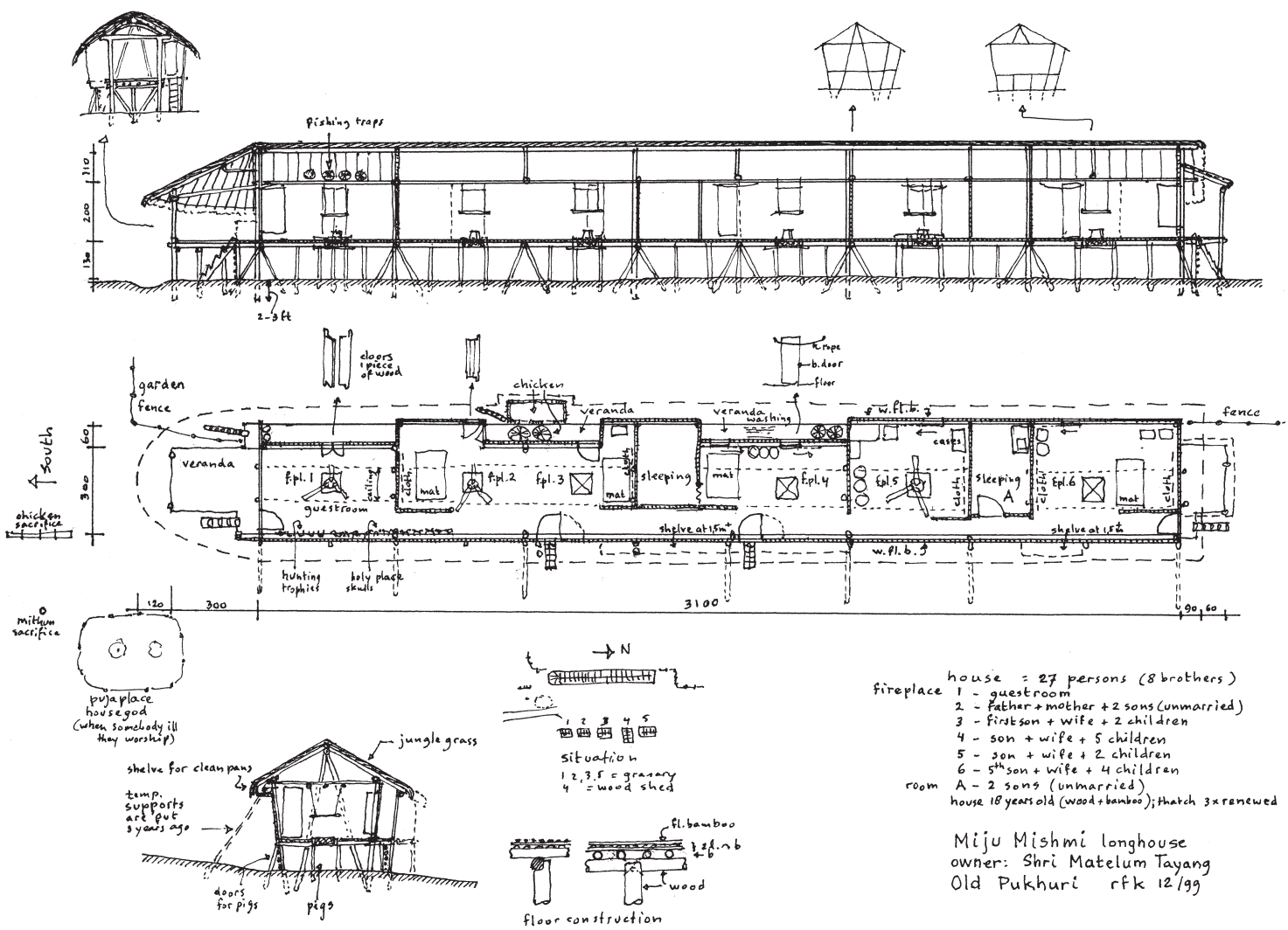
D. 089: Digaru Mishmi longhouse, with 5 fireplaces, Loliang – plan, sections and details.

P. 174: old father (of the fifth fireplace), Digaru Mishmi longhouse, in D. 089, Loliang, 1999.



D. 090: Digaru Mishmi longhouse, with 4 fireplaces, Huchailang – plan and sections.

P. 175: Miju Mishmi longhouse, in D. 091, Old Pukhuri, 1999.



D. 091: Miju Mishmi longhouse, with 6 fireplaces, Old Pukhuri – plan, sections and details.

P. 176: roof construction above front veranda, Miju Mishmi longhouse, Old Pukhuri, 1999.

struction. The house threatened to fall over, they told me, and the extra shores outside had been put up three years ago. Because of the traditional north-south orientation, houses suffered from strong westerly winds.

The construction was made of wood, the floor of flattened bamboo and the roof-cover of jungle-grass. 'The house is 18 years old,' they told me, 'and in this period the roof-cover has been renewed three times.'

KHAMPTI

Overview

The houses, which are one-family and built on raised platform on posts, are L-shaped, with five rooms connected by a veranda that is accessible by a staircase. The construction is of wood, completed with bamboo, while the floor-cover is flattened bamboo and the wall panels are woven flattened bamboo. The roof is covered with palm leaves.

Commentary

The journey to the Khampti area was a difficult one. We navigated around a washed-out bridge by driving in the dry river bed, then drove right through a shallow river and over a series of narrow, temporary wooden bridges. A floating military bridge of 15 big rubber pontoons connected the banks of the Lohit River. Only when we reached a second pontoon-bridge did we realise we were on an island. This second bridge was much longer, with 39 pontoons. In the middle section, long fixed cables kept the bridge in a slightly bent line against the stream, to prevent it from floating away. Both bridges were heavily guarded by soldiers.

Looking at the 3,000 to 3,500 metre-high mountains rising steeply out of the Lohit plain behind the town of Tezu, you could imagine that tectonic plates bumping together must have forced the earth-layers to stand upright, a process that is possibly still continuing and the reason for so many earthquakes in this region.

Later we crossed another river, the Belang, which was 50 metres wide, but we reached the other bank without problems and arrived in Chowkham, a large place with government offices, bungalow-type houses and also a Khampti house with an L-shaped ground plan. In a neighbouring village we met a beautifully dressed Miju Mishmi man, with a shawl around his head, a necklace of old British coins and a hanging sword.

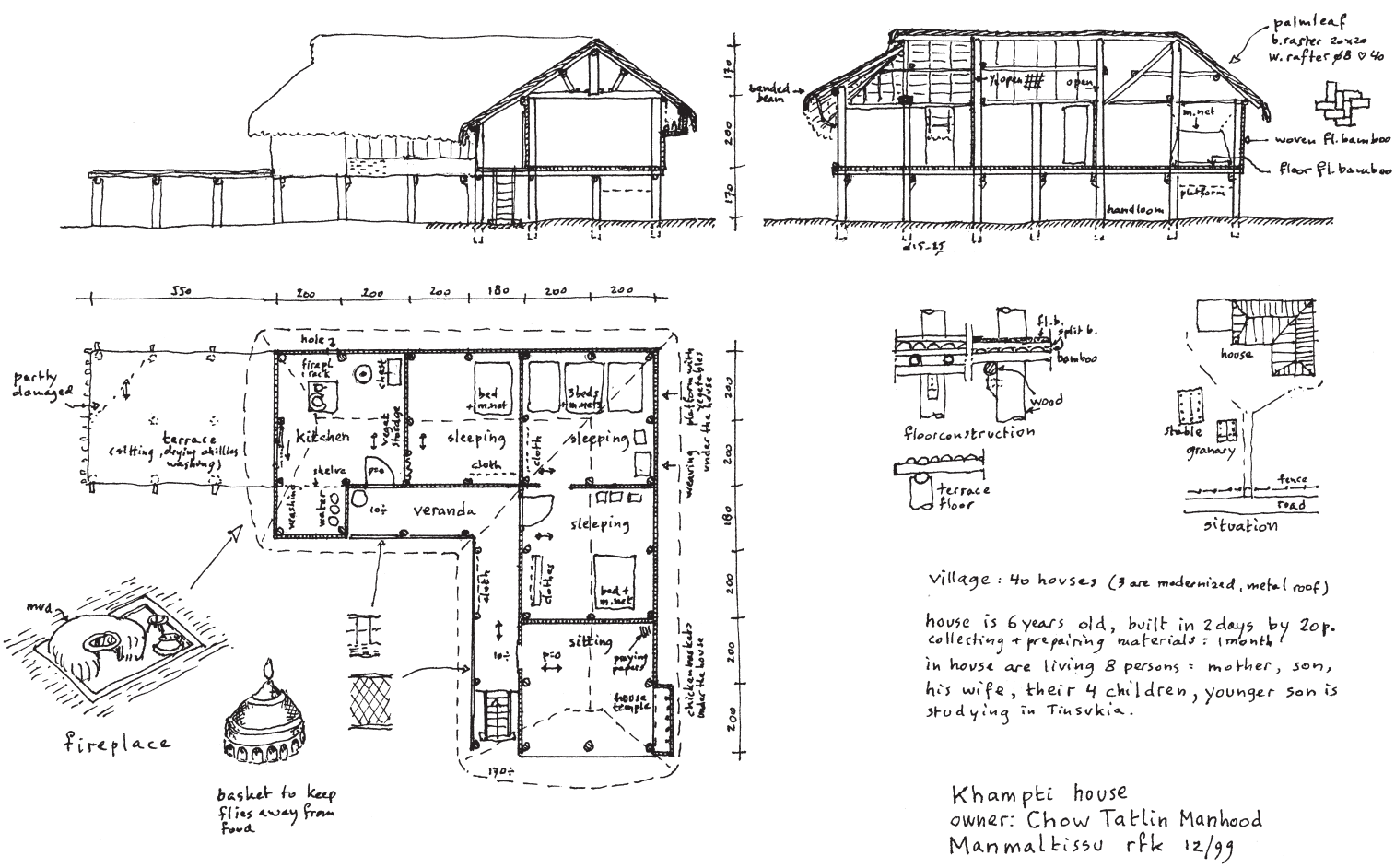
The road led us through a flat region with thinned-out jungle, young trees and bushes overgrown by climbing-plants. We passed fields and small farmhouses, some built on a clay plinth, some on a platform.

In the Khampti village of Manmaltissu, we saw houses built on platforms but unique because of their L-shape. In a small shop along the road we met a herb-doctor, a Singpho man, who was willing to take us to the house behind the shop. Luckily somebody was at home, an old lady who lived here with her son, his wife and their four children. A younger son was studying at Tinsukia in Assam and was not at home anymore.

The house had a well-arranged L-shaped ground plan (D. 092 and P. 177). The veranda, accessible from a staircase, was connected to all five rooms. The front room, open at one side, was the reception room and house temple. Three sleeping rooms followed, with mosquito nets hanging above all beds. At the other end was the kitchen, which was connected with an outside terrace. The terrace was in a rather bad state, but they were too busy now with rice harvesting to be able to repair it.

The house stood on very high poles. The construction was of wood, completed with bamboo, while the floor was of flattened bamboo and the wall of woven flattened bamboo. The roof was covered with palm leaves. Under the platform, in a corner and between the poles, was the place for the loom, and nearby was a small hanging floor for storing vegetables.

P. 177: Khampti house in D. 092, Manmaltissu, 1999.



D. 092: Khampti house, Manmaltissu – plan, sections and details.

SINGPHO

Overview

Singpho (Jingpho) houses are rectangular, built on a raised platform and consist of a front veranda, a large middle part and a back veranda. The large middle part has two or more rooms—the number depends on the family—each of which can have a fireplace. The first room is for guests, the second for the parents, other rooms for an elder son and his wife, younger sons and their wives, and finally for unmarried daughters. The house we visited had a back room instead of a back veranda. Building materials are wood and bamboo for the main construction and thatch for the roof.

Commentary

Entering the Singpho village of Imphom, we saw that the houses were built on platforms and that the shape was rectangular. The men wore sarongs with a checked pattern. The Khampti herb doctor whom we met in a Khampti village accompanied us to show us a Singpho house. Passing a small Buddhist temple, he said, 'The religion of Singphos and Khamptis is a mixture of Buddhism and animism, like the belief in good- and evil-minded spirits.'

Looking at the house we were going to visit, we saw it stood on high poles and that the platform was two metres above the ground. The doctor told us, 'Four people live here: a widowed mother, her son (the house-owner) and two daughters.'

Then we met the lady and she kindly showed us the house (D. 093 and P. 178). Climbing up the steps, we reached a wide veranda with a ritual space at the right side. The front door, which was left of middle, opened into the passage that connected the three rooms of the house.

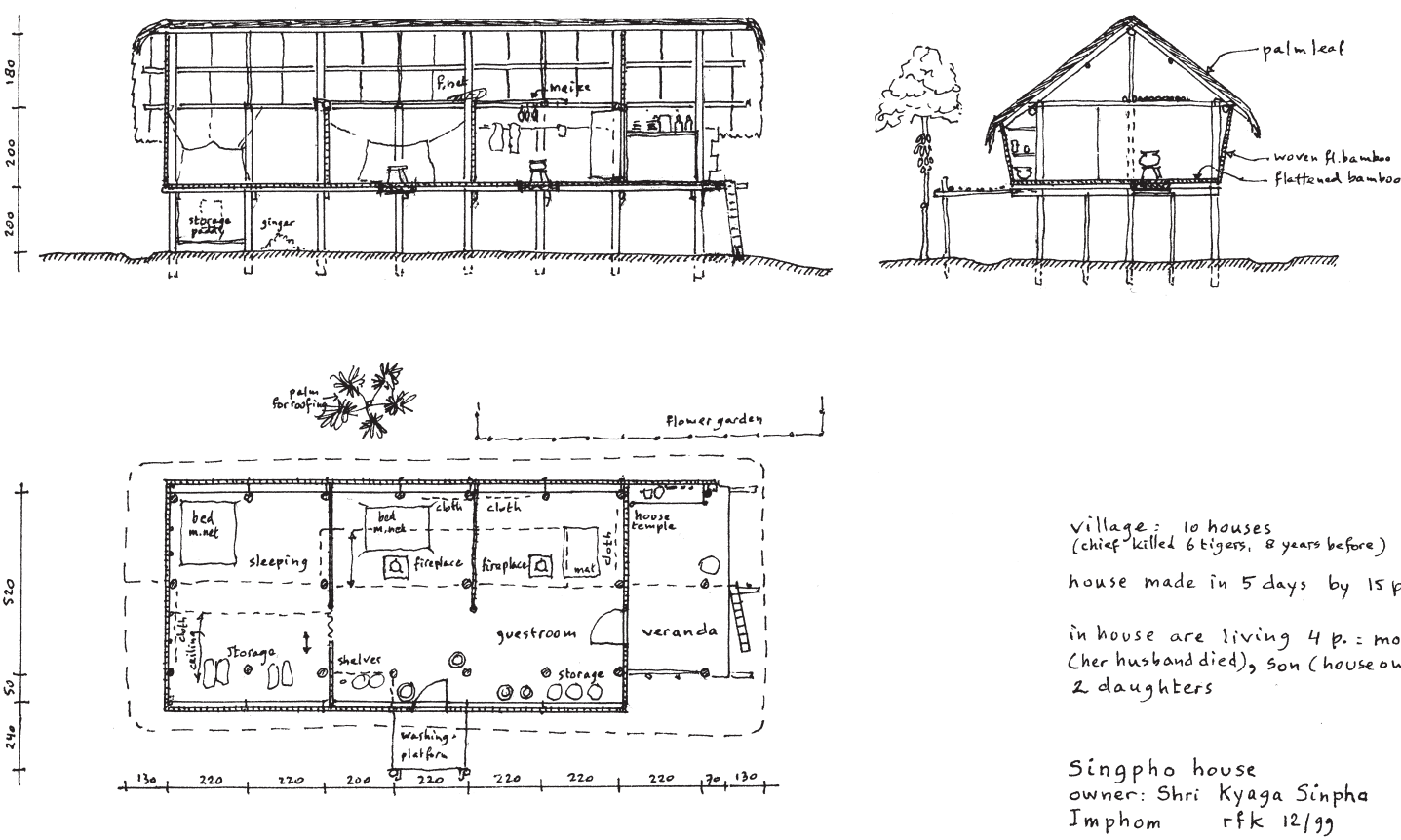
The two foremost rooms were in open contact with the passage, and each had a fireplace with mats lying around for sitting and sleeping, and clothes hanging against the wall behind. The first room was the guest room. The third room at the back contained a big bed in the right corner. In all three rooms the left side was used as storage. In the centre of the sidewall a little door opened onto a terrace, which was used as a washing place. There was no back veranda.

The materials were similar to those used in the Khampti house we had seen (D. 092): a wooden construction, flattened bamboo floors, woven and flattened bamboo walls, and palm-leaf roof cover. The lady told us that the house was built in 5 days by 15 persons.

According to the Khampti herb-doctor, the headman here had killed six tigers, some eight years ago. The way he told it, one had to admire the man's courage. Edith was told that the herb-doctor could help when a normal doctor couldn't do any more and that he was also able to heal broken bones, arms and ankles.

We were taken to the tiger-conquering headman's house, but he was not there and his son received us. There were some other visitors, and cars were parked in the front yard. One of the visitors was a merchant in weapons and munitions, but also fishing gear. He drove a Tata Sumo Safari, the most expensive vehicle of its kind, though the front number-plate was missing. Later we were told that he was a 'mafia man,' and that they all drove cars like this. By 'mafia' they meant armed insurgents who extort money from business men and officials. Our driver wanted to leave as soon as possible.

P. 178: Singpho house in D. 093, Imphom, 1999.



D. 093: Singpho house, Imphom – plan and sections.

TANGSA

Overview

Tangsa houses are built on a raised platform on piles. The partition consists of a large terrace, a front veranda and guest room with fireplace, a second room with a cooking fire and sleeping place, a rear veranda with space for storing water and pounding rice, and at the side an enclosed washing place. The front and the back veranda have entry staircases. The materials used are wood and bamboo for the construction, flattened bamboo for the walls and the floor cover. The roof is thatched.

Commentary

We visited the Tangsa village of Nea (or New) Sallang, and, at the first house, we found a boy who wanted to be our guide. Walking between the nearly identical platform houses, at the end we met a nice couple who agreed to show us their house (D. 094 and P. 179).

On the front terrace, rice was spread on mats to dry in the sun, along with a kind of long potato cut in flat pieces; later we heard it must have been tapioca. We climbed up the tree-trunk stairs to the platform and were invited into the big veranda (in fact more an open front room) to sit around the fireplace. We explained what we wanted to do and they had no objection.

The space where we were sitting was the common room or guestroom. Above the fireplace hung two racks for drying all kinds of things. Along the left side of the room, the floor was ten centimetres higher forming a sitting edge and sleeping place. Along the right side, from front to back, were places for firewood storage, weaving and study with a small table for the son.

This house had two fireplaces, as did most Tangsa houses, although some had three or four. While Edith and Sushil talked with the family, I walked through and around the house to observe and draw it. The owner of the house, Mr Tissu, went with me. Behind the guestroom, in the room with the second fireplace, he said, 'This room is for cooking and sleeping. In former days it was used by nine persons (husband, wife and seven children), but now only by three. From their seven children only one son lives here; their five daughters and other son all live in Changlang.' The floor on the left side was raised, and shelves against the right sidewall were used for kitchen utensils.

The back veranda looked almost like a room because the roof nearly covered it all. This was where the rice is pounded; rice was stored in an enormous jute bag and jute basket. The mortar had its own foundation, as in other tribal groups, but here the mortar pole was kept upright, pinched between four bamboos that extended into the ground. 'Pestles exist in difference sizes, big and small, depending on who pounds,' Mr Tissu said. To one side a small space, with large gaps in the floor, was used for washing but not as a toilet. For that, they went into the bushes.

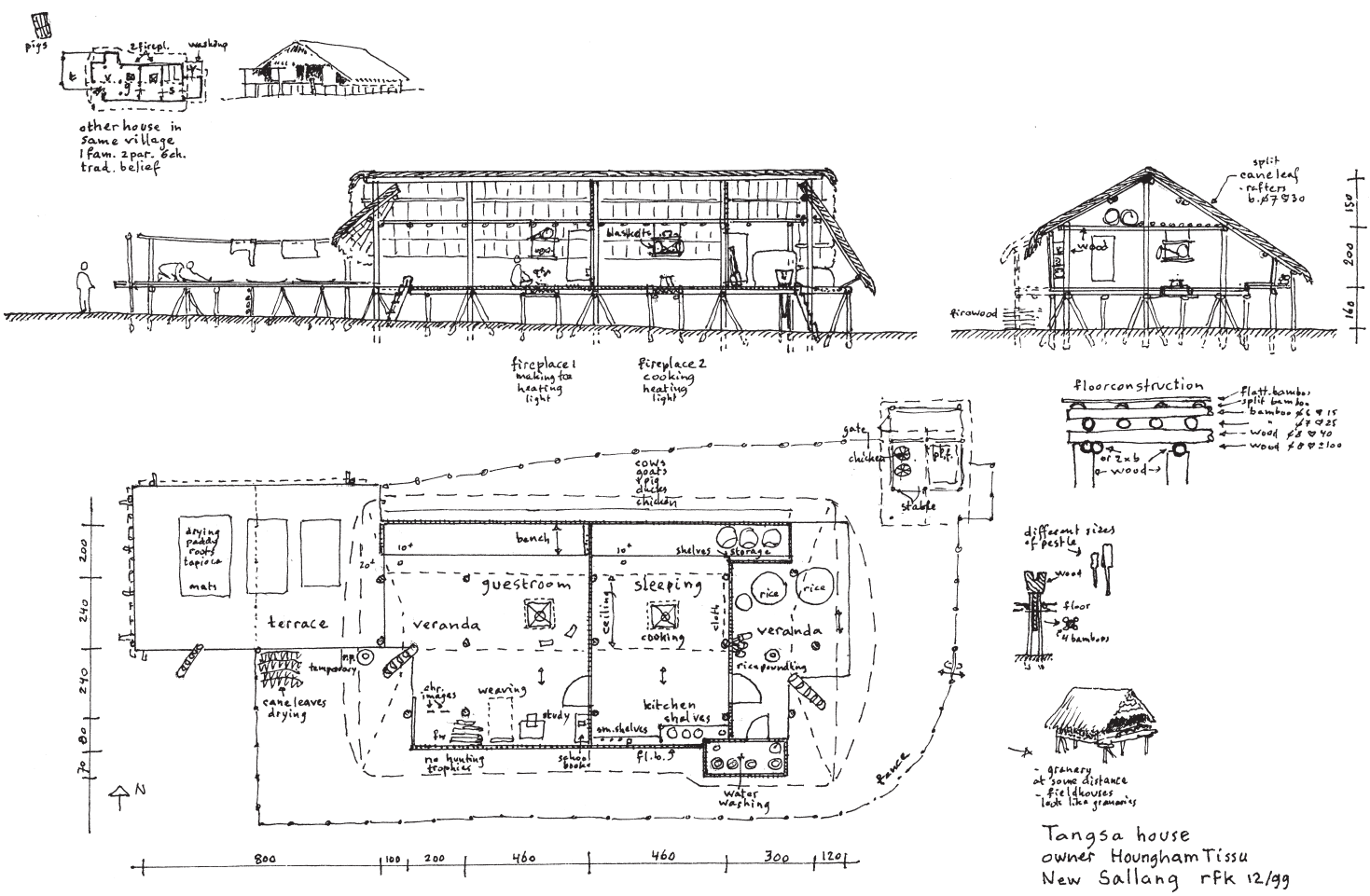
Descending from the back veranda down a small, notched tree-trunk, we entered the yard. It was fenced around the house and halfway to the front terrace, in order to keep the animals inside. They kept goats, chickens, a pig, geese and cows, but the cows were now outside the fence. In a corner of the back yard was a chicken-coop and outside the fence was the granary, on poles, just like the house.

Most people in Nea Salang were Christians, Baptists. Near the entry to the guestroom two prints hung from a beam, one of The Last Supper and one of Jesus and Mary. We asked the people if they knew what those prints represented. They knew about Jesus but not about The Last Supper. 'We bought these prints in the market, just because we thought they were beautiful,' they said.

Mr Tissu told us, 'When I started one year ago to renew my house, the people of Nea Sallang didn't want to help me—as was usual before. Then I asked the people of Old Sallang, where they are not yet converted to Christianity, for help and they came directly. In four days my house was finished.'

He then added, 'The fence around the house exists because our not-so-social neighbours complain when the animals enter their yard. That's the reason all the houses here have a fence around the yard, except the house of the only remaining family who follows the old beliefs.'

P. 179: Tangsa house in D. 094, New Sallang, 1999.



D. 094: Tangsa house, New Sallang – plan, sections, detail and variant with plan and view.

P. 180: Tangsa house (detail upper left in D. 094), New Sallang, 1999.

The house of the remaining traditional family stood a bit secluded on a lower plateau, in front of the village. One family lived there: husband, wife and six children.

I wondered if the house was different to Mr Tissu's, but it appeared that the main design was the same. And it also had two fireplaces. The small differences didn't seem significant. The front veranda was a bit more screened, and behind the guestroom were not one but two rooms, of which only the first had a fireplace. The back veranda was half-enclosed to make a small room, while the rest was for storing water. A free-standing, small pigsty stood in front of the house. And, further, there was no fence around the yard (see the small sketch at top left of D. 094 and P. 180).

We walked once more through the village. Nearly all houses stood in an east-west orientation, only a few were north-south. All houses had their front terrace and guestroom directed to the central open space of the village.

Nea Sallang consisted of twelve houses and had been founded only seven years ago. Old Sallang, with its 13 houses, lay higher up on the mountain. 'You can get there in an hour by a small footpath,' they said. For us that probably meant three hours, and then back again, so there was no chance for us that day.

Asking about the possible changes in their houses over the generations they told us, 'Tangsas still build their houses in the same way as in the time of our grandparents.' And they assured us that 'the houses in Old Sallang are the same as those in Nea Sallang.'

NOCTE

Overview

Nocte houses are rectangular, with a series of rooms behind each other, built on a platform. They include a large front room with porch, connected front terrace and a small back porch, a low hanging front roof with a half circular opening to the front terrace and lower extending eaves above the rice pounding table.

The wooden staircase, rice pounding table and benches are often marvellous pieces of carving. The central posts reach above the ridge. The headman's house is of the same type, only bigger with more rooms. The dormitory (*morung*) looks similar to the house but is shorter, with one room and a fireplace.

Front entry is up the staircase and into the front room, with the men's fireplace, which is a reception room. The back room is for women, with its cooking fireplace. The front terrace, which forms the spatial connection with the village, is used for sitting and drying food, while the back porch is for washing. Pigs live under the house.

The main materials used are wood and bamboo for construction, woven flattened bamboo for floor and walls, and palm leaf on the roof. New houses sometimes have a metal roof.

Commentary

We saw our first typical Nocte houses with thatched roofs and large front terraces (P. 181) in the mountains on our way to Khonsa.

In front of the Circuit House in Khonsa, where we stayed, a few local men were talking together. One of them, a Nocte man, was presented to us as the 'king' or 'future king.' Laughing, he said, 'not king, but son of the headman' and then invited us to visit him in his village Kheti. 'It's seven kilometres from here,' he said, pointing toward the mountain range behind Khonsa.

The next day, following a winding road uphill and into a valley, we arrived in Kheti, a big village of some 60 to 80 houses on platforms. A villager helped us to find the house of the headman, a very big pile-house on a slope with recently renewed corrugated metal sheets on the roof. After telling the headman about my research and showing some of my drawings, we were welcomed into his house.

Except for the roof cover, the house looked traditional (D. 096 and P. 183). It was very big, double width and length. He lived there with his wife. 'The children don't live at home anymore,' he said while showing us the public section with fireplace, cane-chairs, a TV and a guest room. The central column had carved sculptures. In the private part were a fireplace and three sleeping rooms, a storage space and a terrace. The whole floor was made of woven flattened bamboo, in a pattern of one strip of bamboo placed over two strips (see details in D. 096, D. 097 and D. 099).

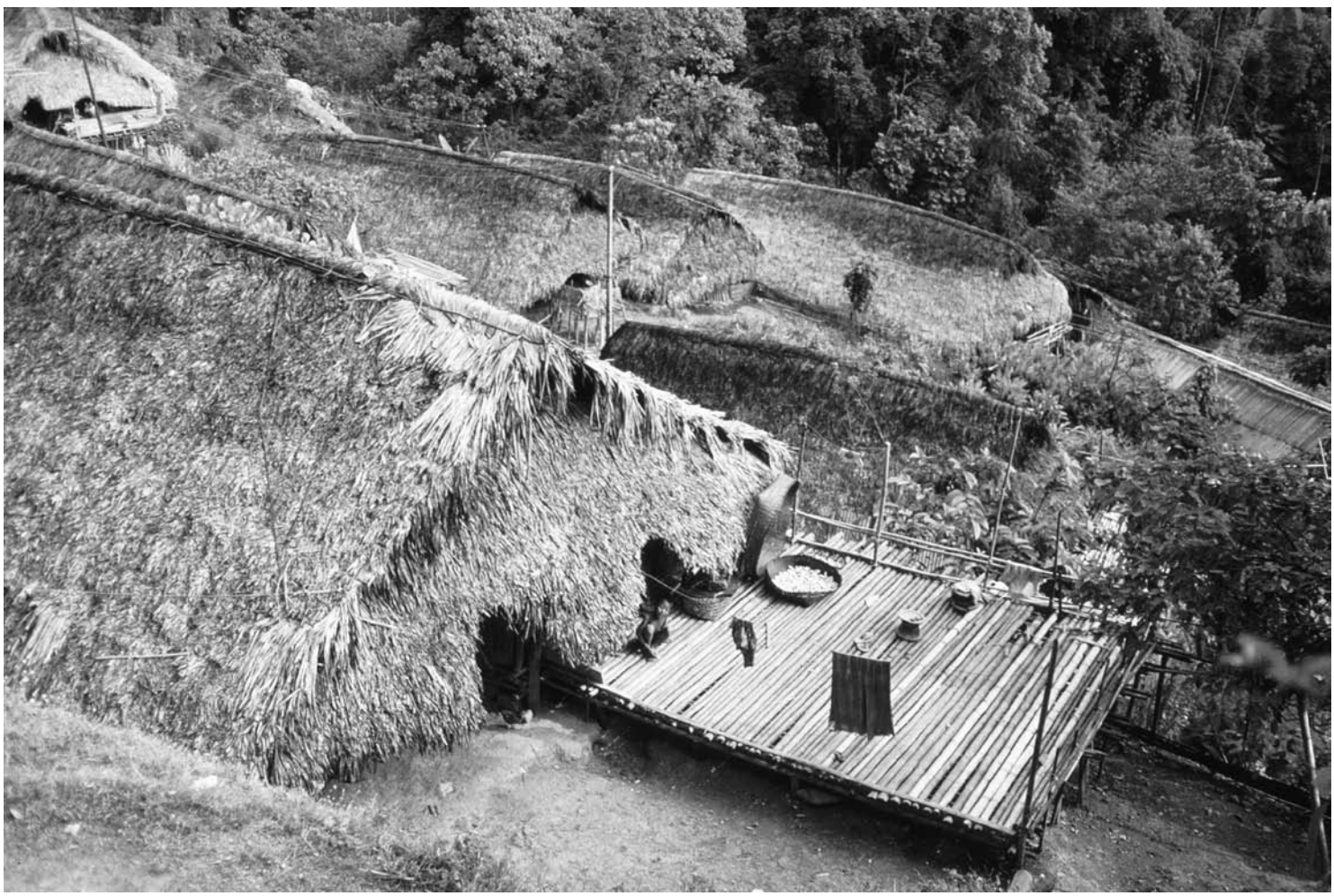
Crossing the big front terrace and going down a marvellous carved staircase, we reached a sloping yard with a wall below the house containing a collection of water buffalo skulls.

Rock-hewn steps led us to the dormitory, surrounded by a wall of flattened bamboo, almost like wire-netting. Inside, we saw a central fireplace and an enormous split-drum, five to six metres long and made from one piece of wood. A man played it with short beats (P. 184). On the rafters above the drum we saw a conspicuous row of human skulls, 50 or 60 altogether.

'They came from a war with a nearby Nocte village that attacked Kheti in 1950,' the headman explained. 'But we defeated the attackers and head-hunted them all. Now only the old people who had been in that war are allowed to touch the skulls.'

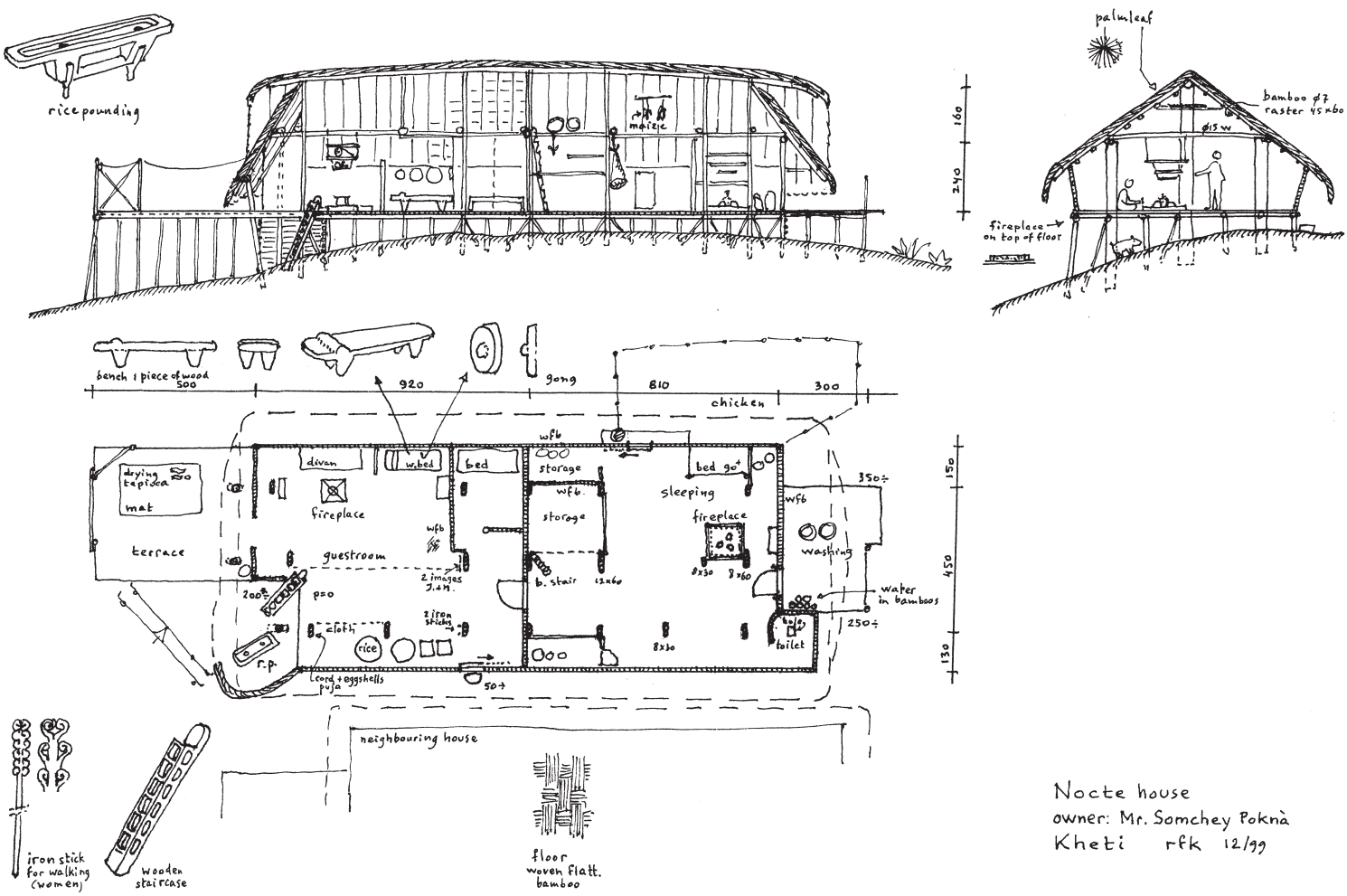
A number of men, called by the sound of the drums, came in and joined in the playing. Some of them stood inside the drum. They used a kind of wooden push hammer to strike it. 'The drum is used to announce messages, for example, to warn the villagers of an approaching enemy or perhaps a fire, or to convene for a festival, rice harvest or building a house. Each message has its own sound and rhythm,' they explained. Hearing the drum beats, I thought, And now perhaps to inform everyone about us, the foreigners.

A bit further down the village we looked at ordinary family houses on piles with big front terraces and palm leaves on the roofs. One house-owner was



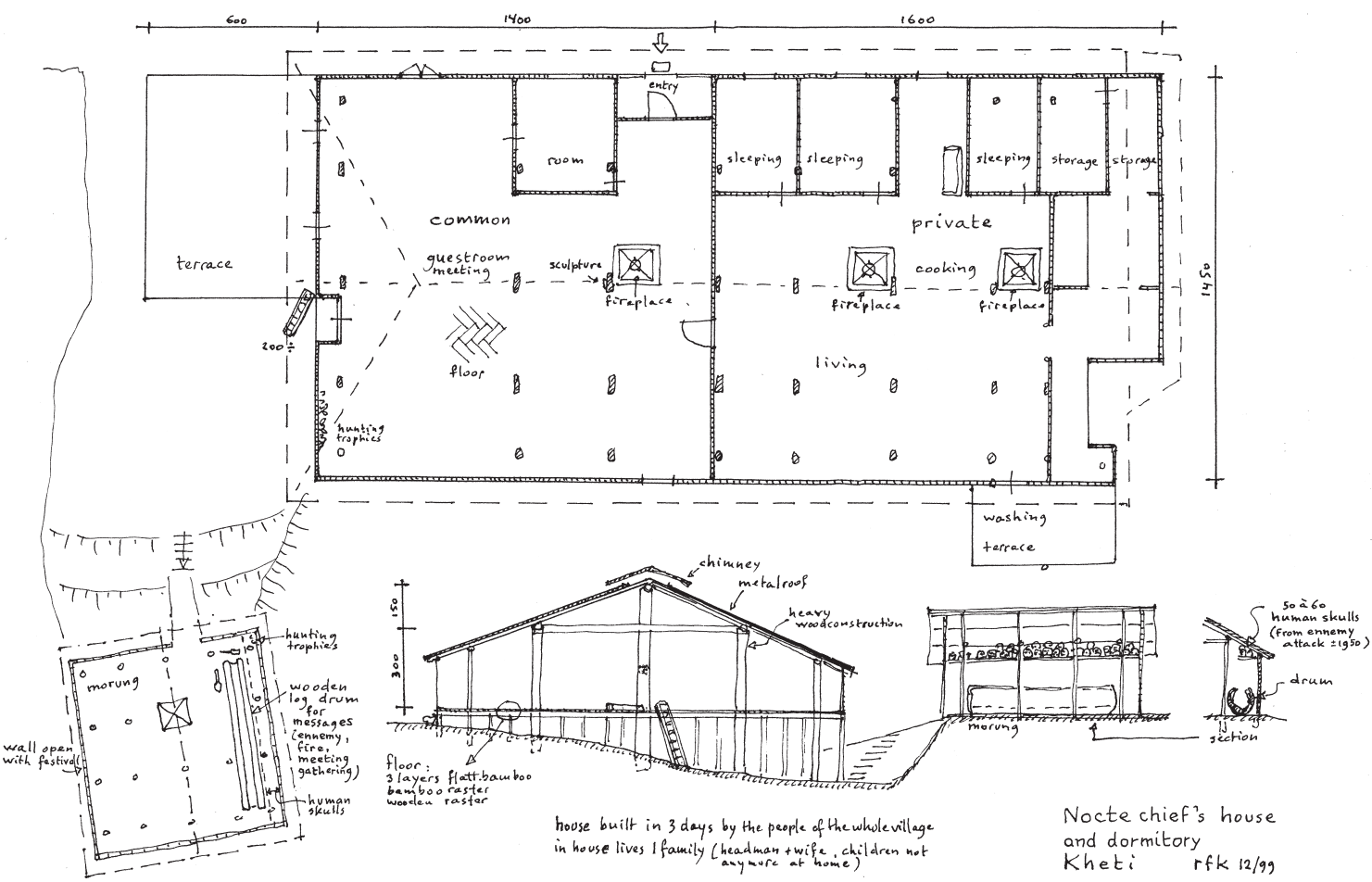
P. 181: Nocte houses in the mountains, near Khonsa, 1999.

P. 182: Nocte house in D. 095, Kheti, 1999.

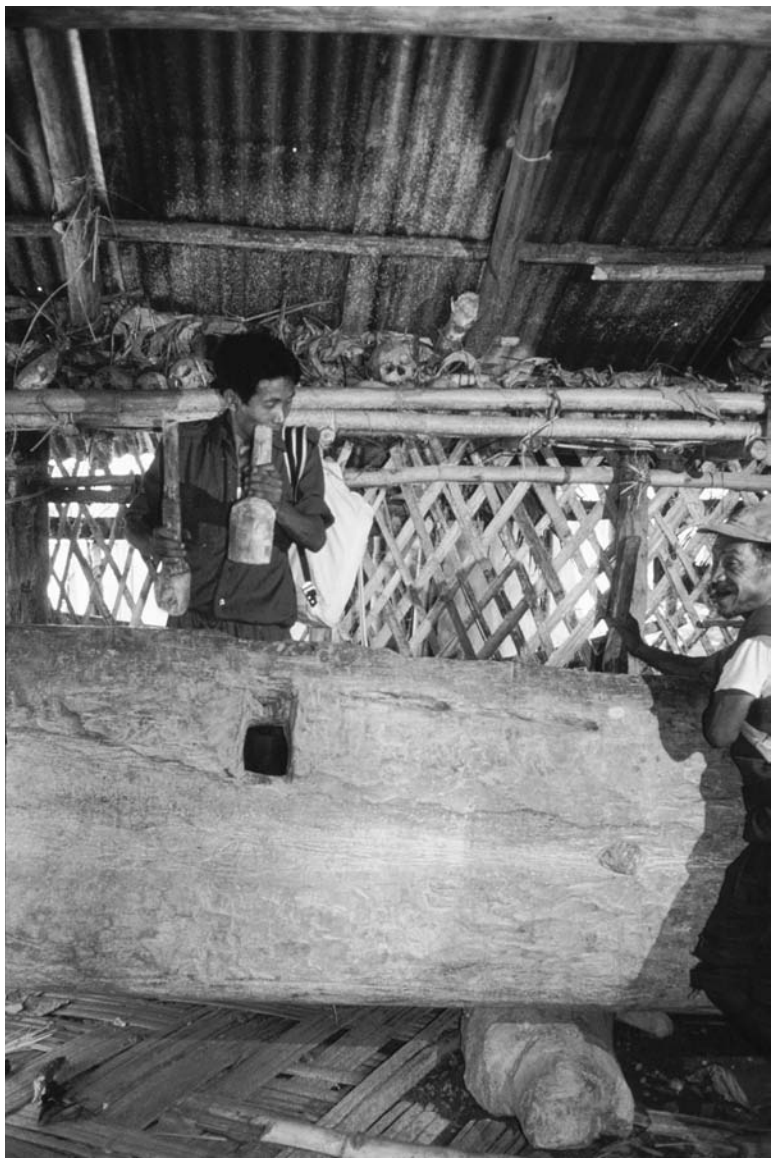


D. 095: Nocte house, Kheti – plan, sections and wooden objects.

P. 183: staircase and water buffalo skulls, Nocte chief's house in D. 096, Kheti, 1999.



D. 096: Nocte chief's house and dormitory, Kheti – plan and sections.



P. 184: split drum playing, with row of human skulls on rafters, 1999.

kind enough to show us around (D. 095 and P. 182). Climbing the beautiful wooden staircase, we entered the front room and then went through the half-circular opening in the roof to the front terrace from where we looked onto the village road. Tapioca lay drying on a mat.

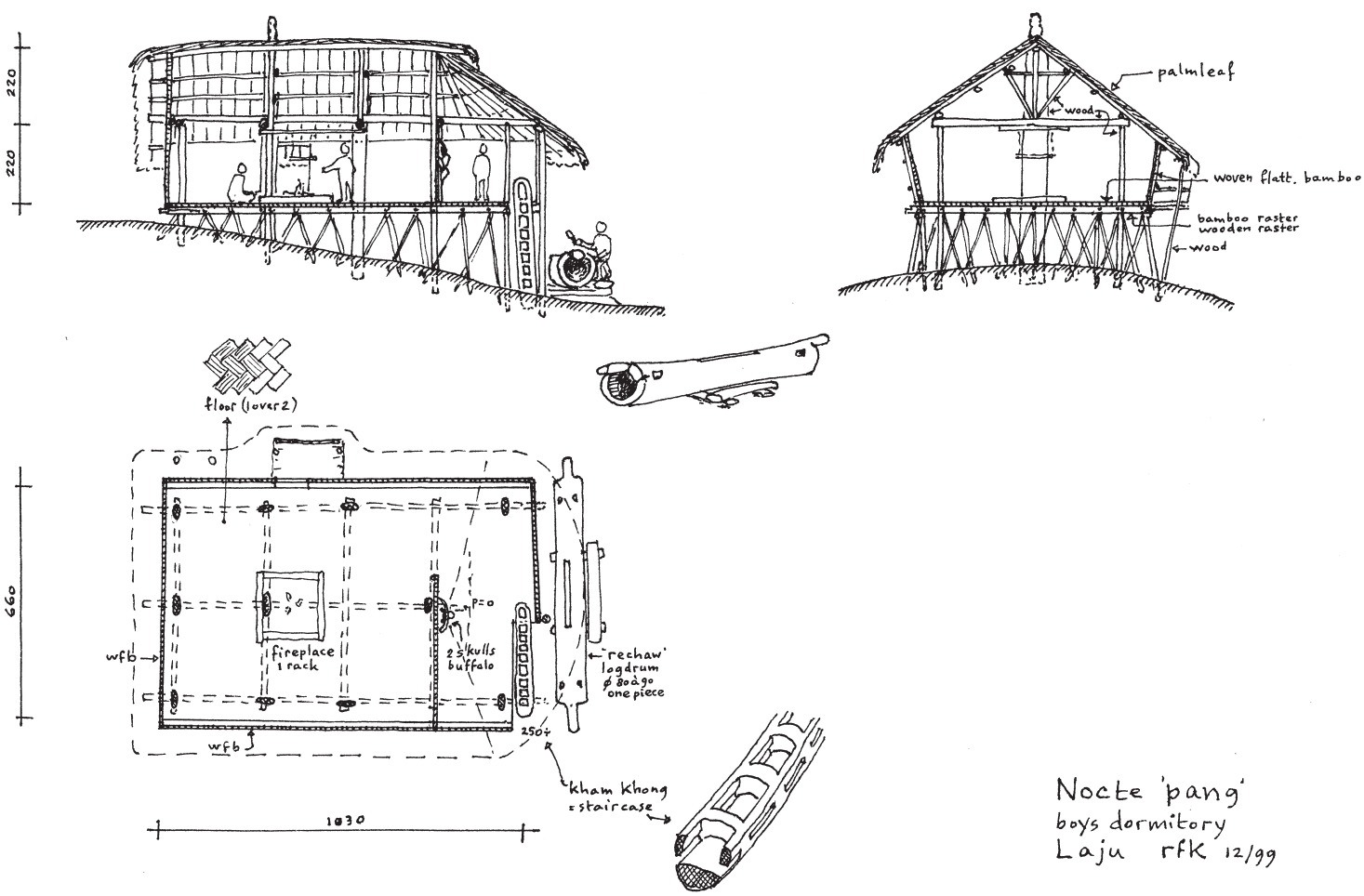
As we walked through the house over the springy woven flattened bamboo floor (here a pattern of 1 over 1; see detail in D. 095 and D. 098), the owner showed us some other rooms for sleeping and cooking and a small back terrace. Next to the terrace was a small toilet with a hole in the floor. Several parts of this house were really wonderful, made of a single piece of wood, such as the entrance staircase, the rice pounding table and a bench with legs and head pillow.

Three days later we visited Laju, another Nocte village. Before that, however, as I worked on my drawings on the veranda of the Inspection Bungalow in the morning, our neighbour, a military man, presented himself. He was interested in my work, and, hearing that we visited villages everywhere, he warned us: 'Be very careful; there is insurgency in this area, with Nagaland and Myanmar nearby.'

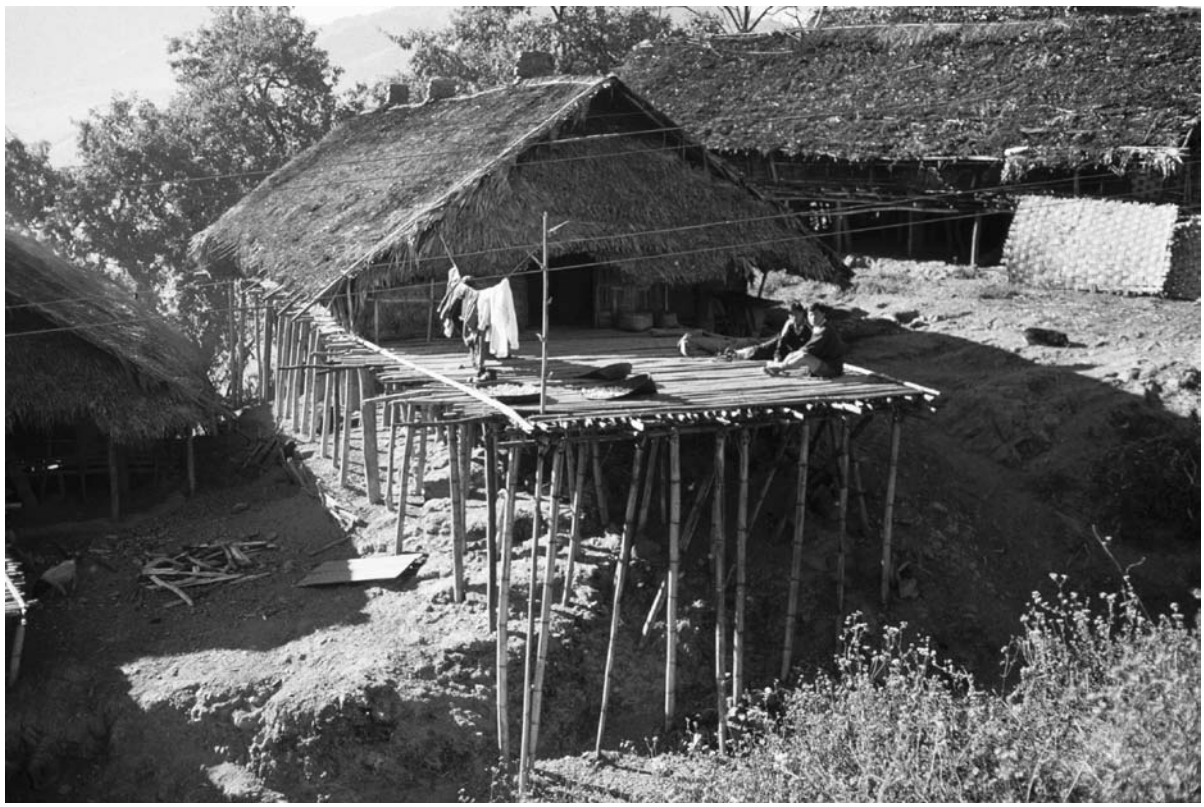
The local government official designated a man as our guide for the trip to Laju. Together we descended along a slippery footpath into the village (P. 192 and P. 188), though our guide was not very talkative.

The village lay on a twisting mountain ridge. The pile-houses and dormitories (*morung* or *pang*) stood on both sides of the rocky, sandy village road.

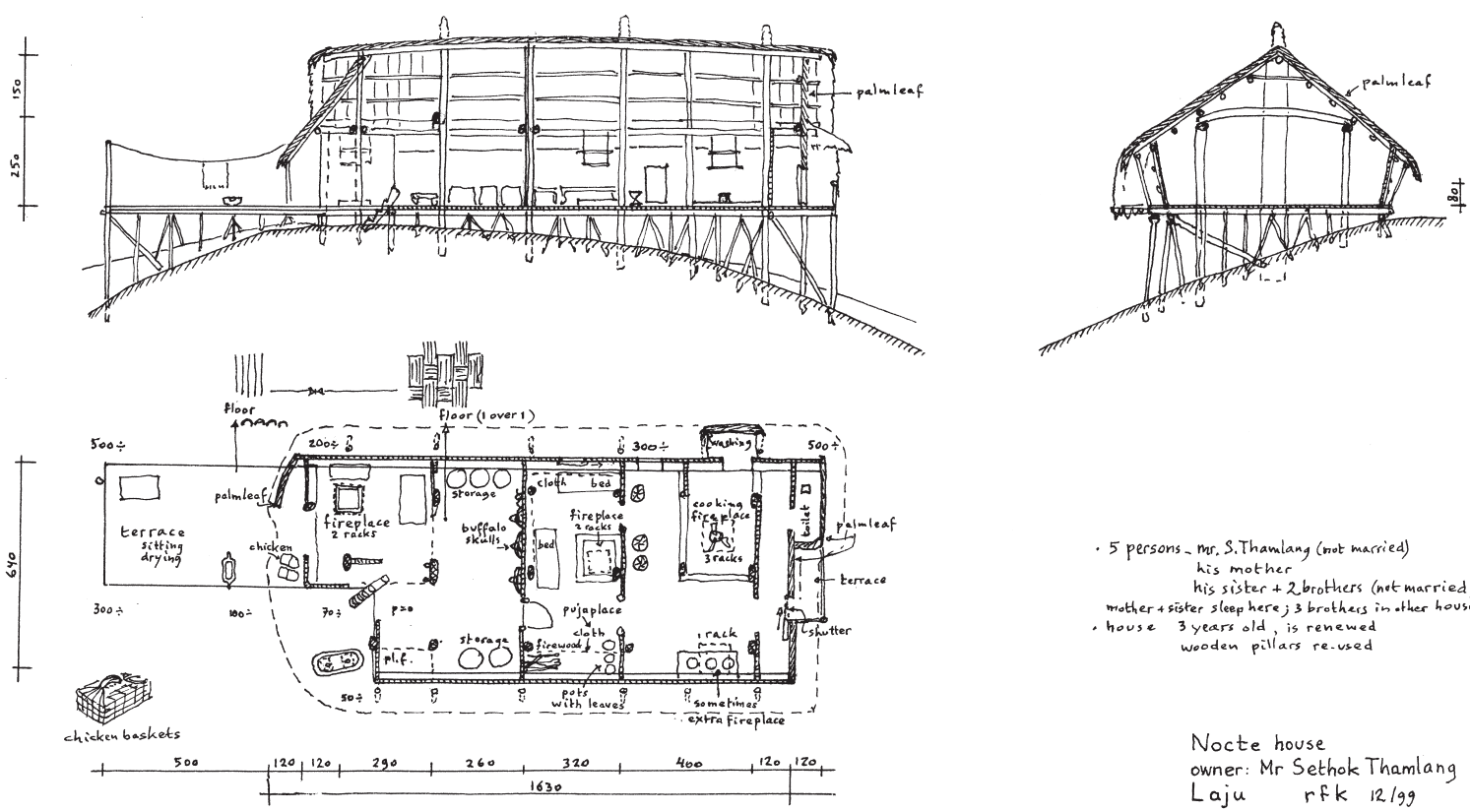
P. 185: staircase and split-drum, Nocte male dormitory (*pang*) in D. 097, Laju, 1999.



D. 097: Nocte dormitory (*pang*), Laju – plan, sections and wooden objects.

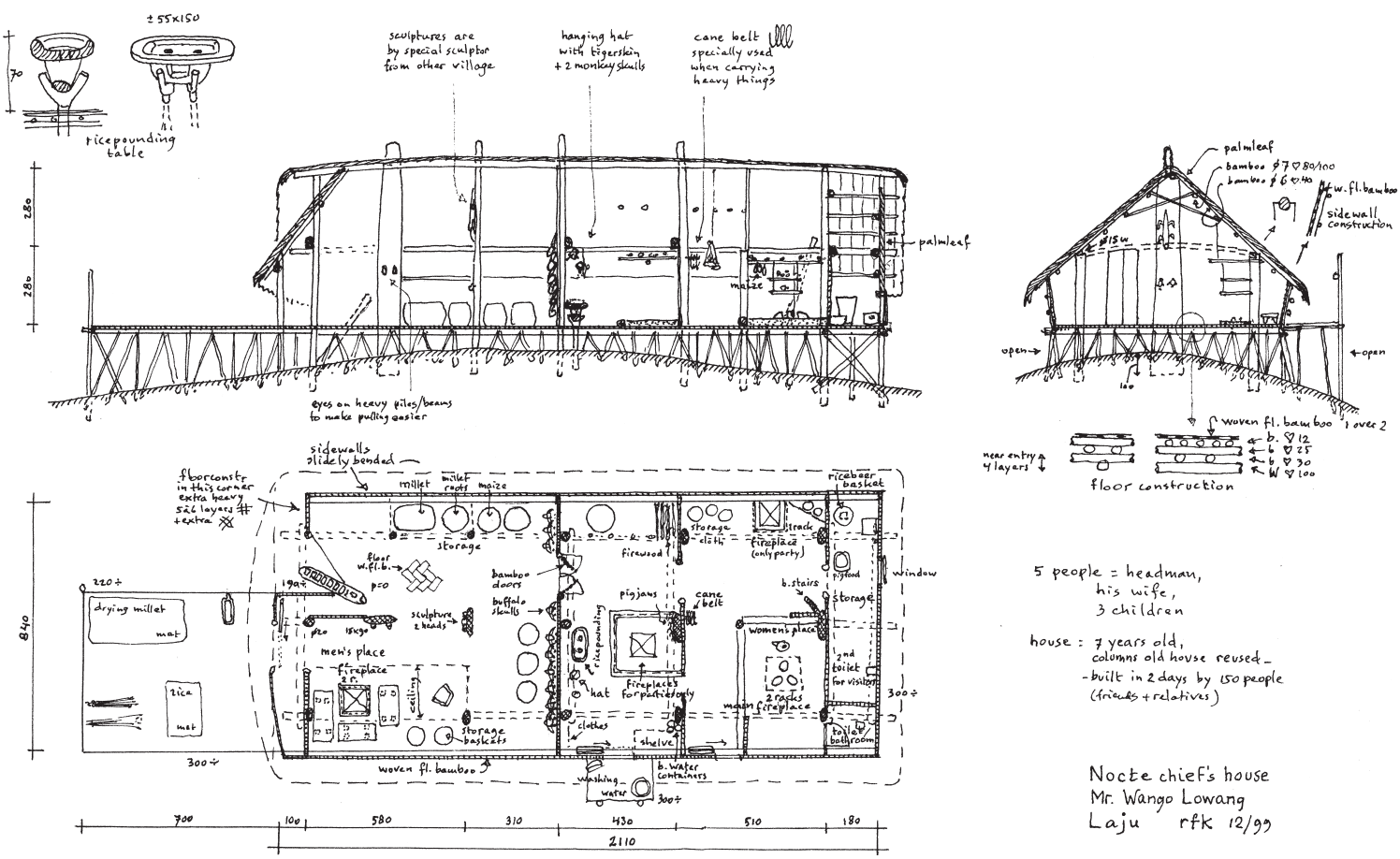


P. 186: Nocte house in D. 098, Laju, 1999.

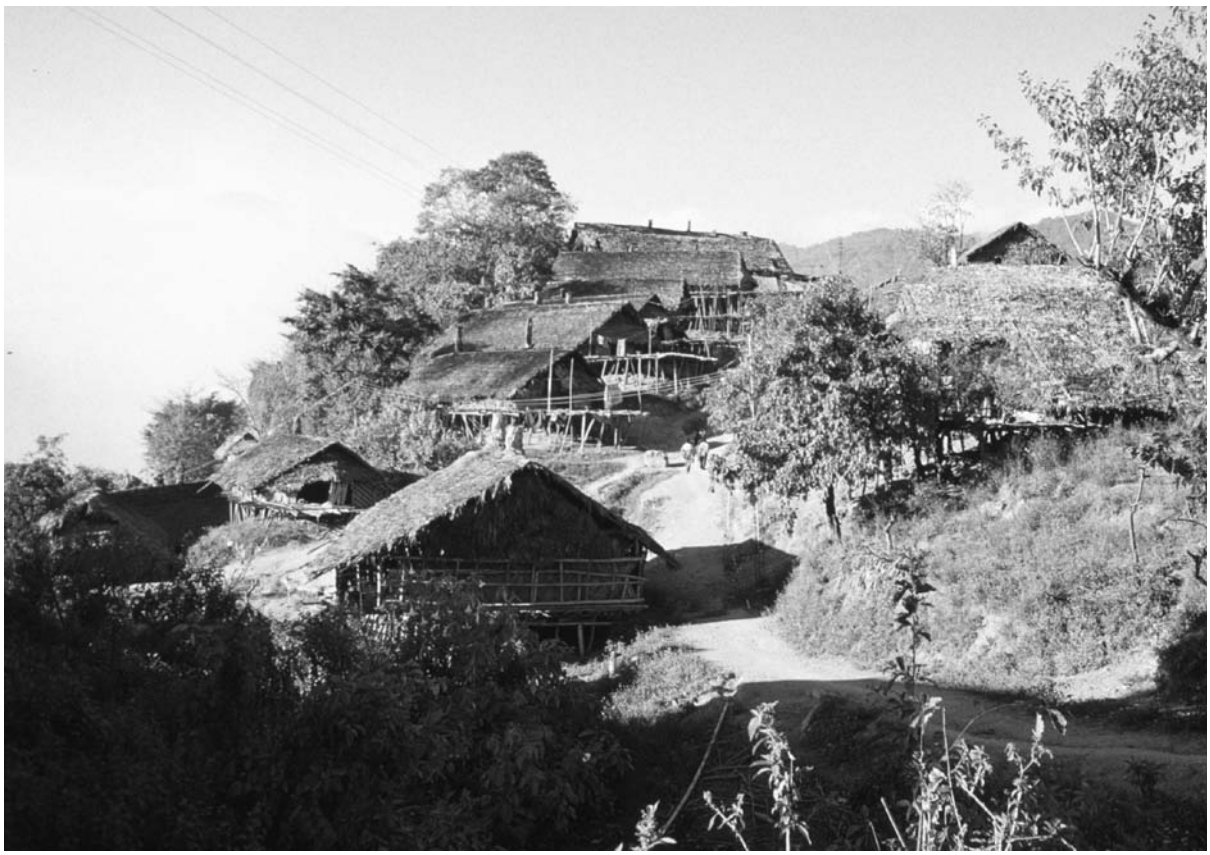


D. 098: Nocte house, Laju – plan, sections and details.

P. 187: entrance staircase, Nocte chief's house in D. 099, Laju, 1999.



D. 099: Nocte chief's house, Laju – plan, sections, details and wooden object.



P. 188: Nocte village of Laju, 1999.

A few women were sitting and working in the narrow space between the houses. Their faces were tattooed. Lines ran star-like from the mouth corners over the cheeks and nose and forehead. Surprised, they looked up at us. Admiring the shape of the tattoo, I asked if I might take a photo. Immediately they disappeared into their houses, and later we heard that recently a television crew had been here and ever since the women had been afraid of foreigners.

Luckily, another old lady sitting on her terrace had no problems being photographed (P. 191). Next to her house blackened piles stuck up out of the ground. A man said, 'There has been a fire in the village, and six houses burned down. It happened at night—fortunately at night—since everybody was at home and we were able to knock down a group of surrounding houses to prevent the fire spreading over the village.'

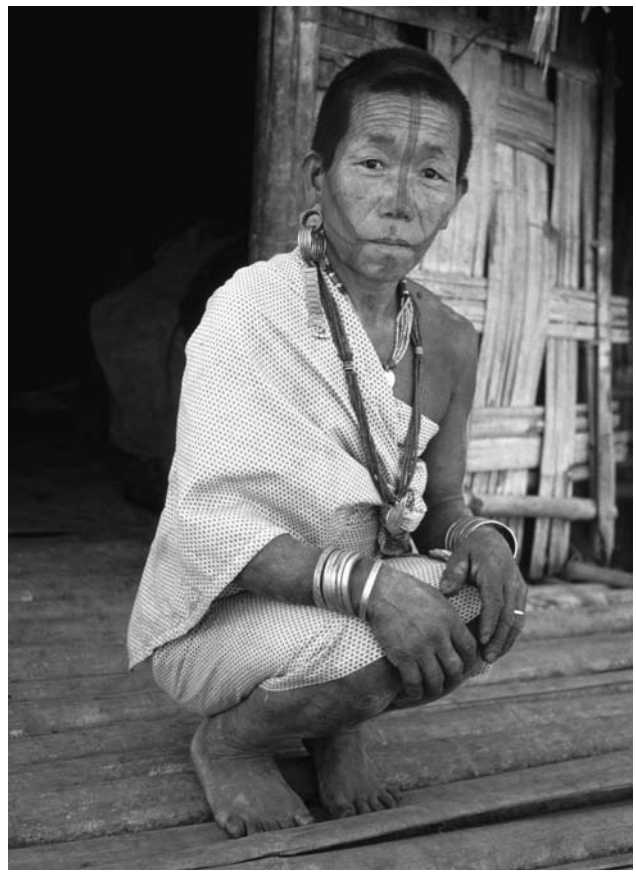
Up a beautiful wooden staircase, we entered the big front room of the headman's house (D. 099 and P. 187). The headman, Mr Wango Lowang, was not at home but his wife and son welcomed us. Trying to speak to them it appeared that our one-day guide didn't even speak the Nocte language. Luckily, in five minutes our resourceful driver found a neighbour who spoke Hindi and even a little English, which made the contact so much easier. The headman's wife agreed to let us look around, but until I promised not to take her photo she wanted to hide.

The son showed us the men's fireplace surrounded by wooden benches, made of one piece, and an impressive collection of water buffalo skulls. One of the central columns was decorated with carvings of a lizard and two human heads. 'The sculptor lives in another village,' he said. The two human heads came from the time when Noctes and Wanchos were still head-hunters, about 50 years ago.

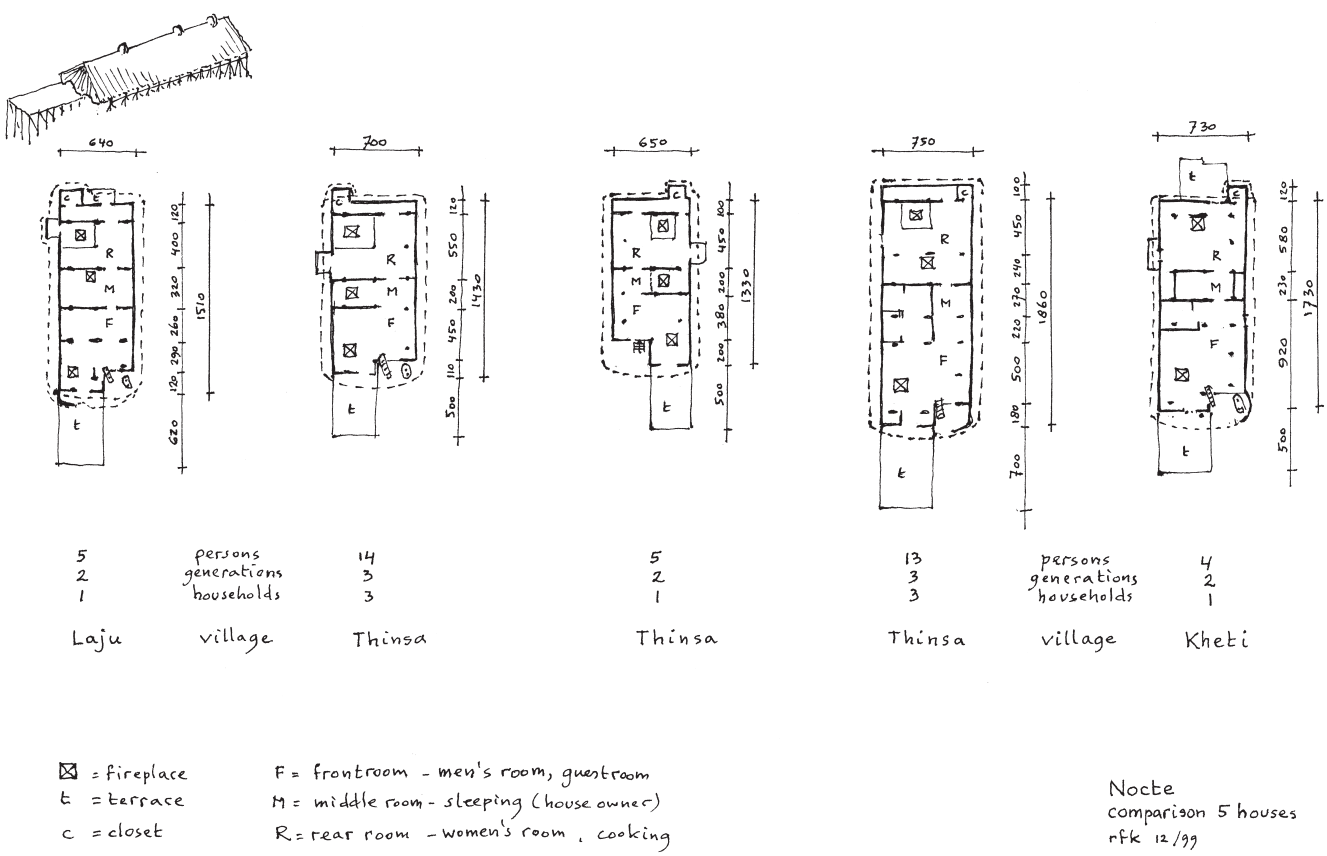
The floor was of woven flattened bamboo, in the 1 over 2 pattern, like in the other headman's house in Kheti, but different to the ordinary family house we had also seen in Kheti (see detail in D. 095). We were told that the headman's house and the dormitory were allowed to have this pattern of 1 over 2, whereas the commoners' houses could only be 1 over 1.

Behind the front room they showed us the other rooms and fireplaces. The very big fireplace in the

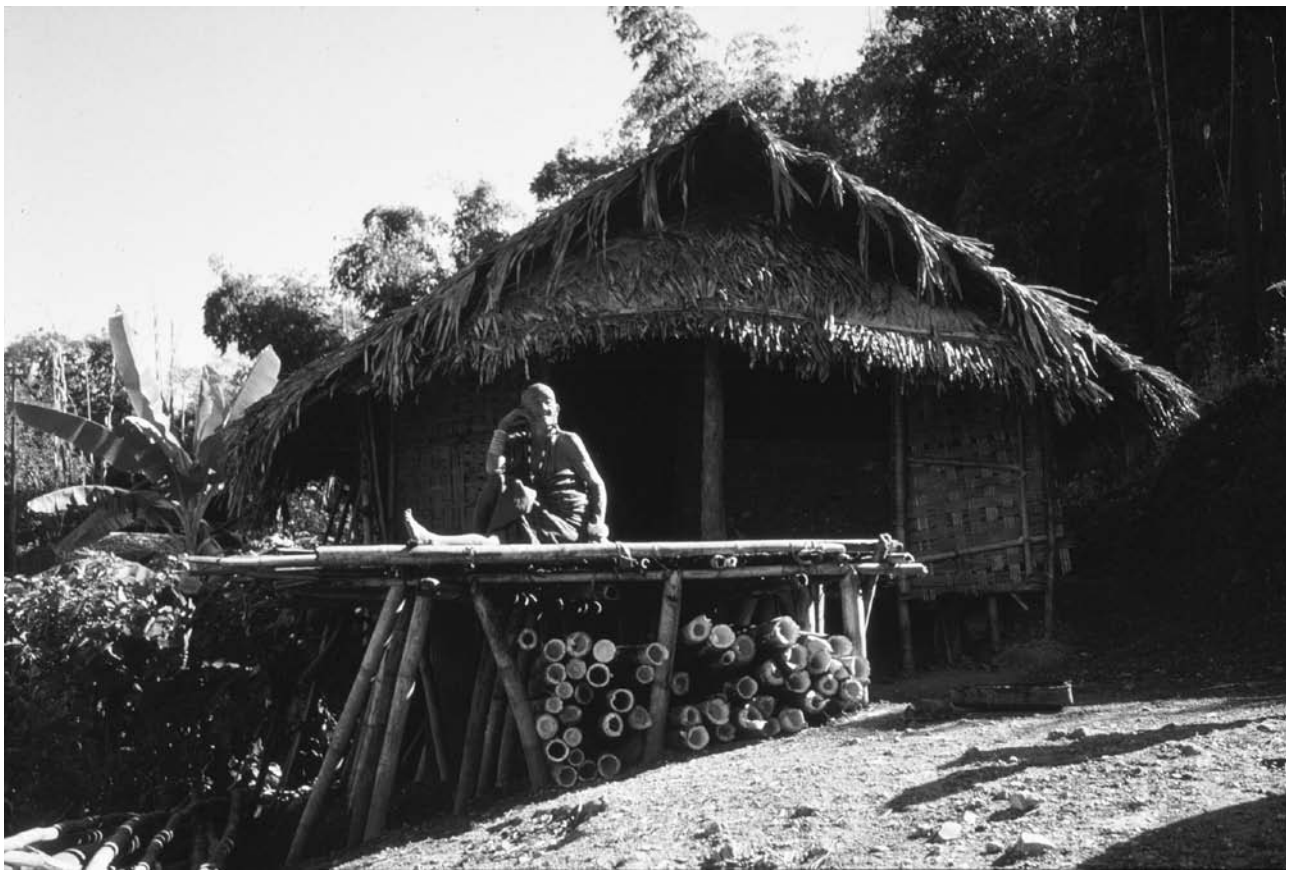
P. 189: son displays chief's hat, Laju, 1999.



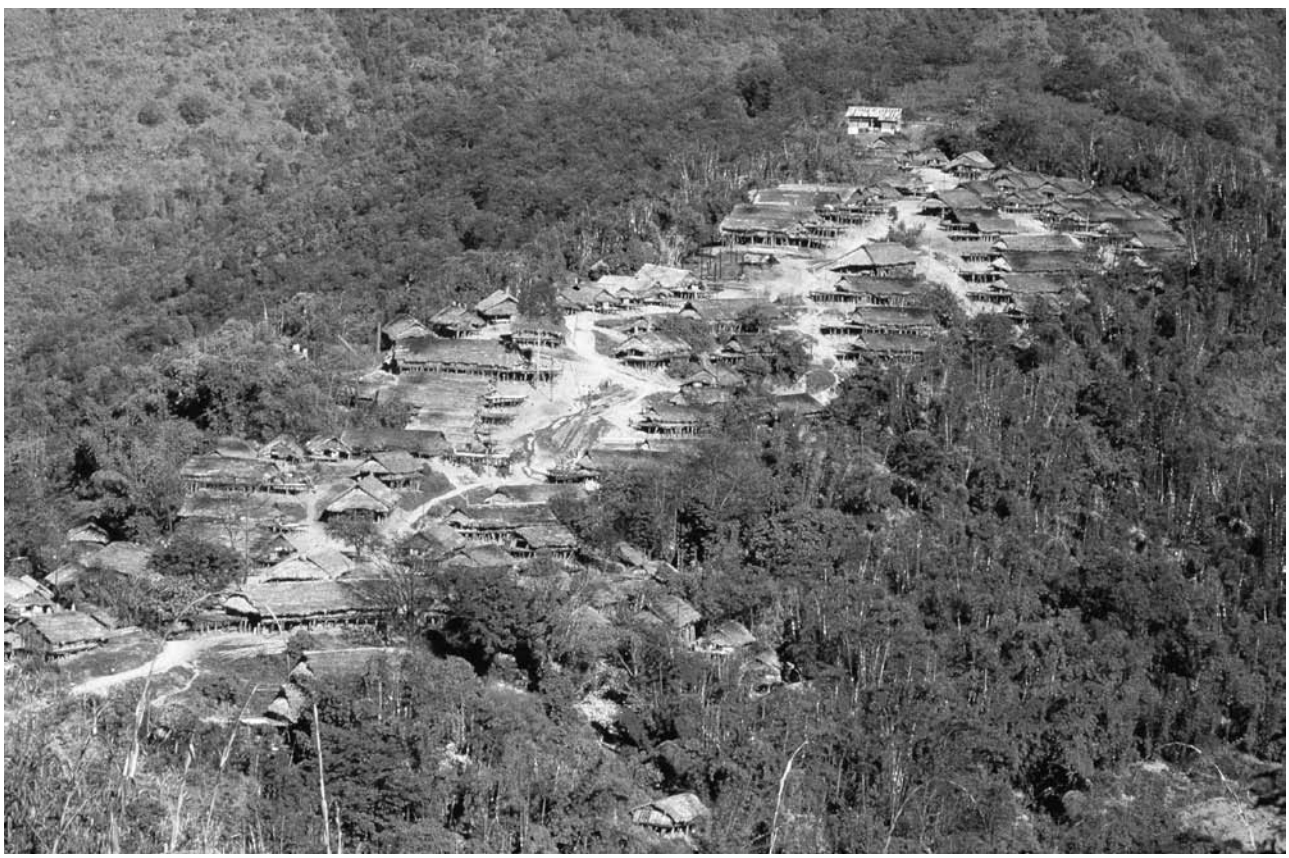
P. 190: Nocte woman with tattoo, Laju, 1999.



D. 100: Nocte houses in Laju, Thinsa and Kheti – plans and view.



P. 191: old Nocte woman on front terrace, Laju, 1999.



P. 192: Nocte village of Laju, 1999.

back room, which was the place for the women, was the main cooking fire. In the middle room we saw a rice pounding table, a marvellous piece of sculpture, with its pedestal resting on forked poles that went through the floor into the ground. Above the pounding table, on a stick, the headman's hat was decorated with long boar teeth. The son put it on his head as a demonstration (P. 189). Next to the hat hung two monkey skulls and another hat decorated with tiger skin.

The neighbour Mr Sethok Thamlang invited us to visit his house (D. 098 and P. 186). The general plan was the same as the headman's house, only everything was in reverse and the rooms a bit smaller. The floor cover was split, flattened bamboo woven in a pattern of 1 over 1.

When I asked for help to photograph a tattooed woman, he shouted out from his front terrace. Pandemonium ensued and women rushed inside their houses, but soon a neighbouring lady came and said she had no objection provided that we sent her the photo. I promised, climbed to her terrace and took some photographs (P. 190).

Near the second dormitory (D. 097 and P. 185) lay a wooden split-drum that was seven meters long. A beautiful sculptured staircase led to the platform, where behind a veranda with two water buffalo skulls we entered a big room with a central fireplace and a floor of flattened bamboo woven in the 1 over 2 pattern (see detail in D. 097). Inside young boys were playing and making a lot of noise. They climbed up the columns and along the roof beams. Some did somersaults in the air and fell onto the springy floor. They told us that 'boys sleep in the dormitory, only boys, and we are not afraid to sleep here alone.'

In another village, Thinsa, I made a schematic ground-plan of three traditional houses comparing them with one in Laju and one in Kheti (D. 100). Although one was reversed, they all were the same type.

WANCHO

Overview

Wancho villages are often situated on a hill top and sometimes on a slope. Villages contain houses for ordinary people, houses for the chief (*ang*) and dormitories (*morung*). The village is typically divided in two or more quarters (*khel*), each with its own *morung.*

Both ordinary and chiefs' houses are rectangular with one end semi-circular. They are built half on the ground, half on raised platform on piles, but in some areas entirely on the ground. The house consists of an entrance room with a place for pounding rice and displaying hunting trophies; a central women's compartment with sleeping rooms, cooking fire and ritual place; a common men's room on a raised platform with sleeping rooms, a fireplace and place for skulls, gongs and shields; and, finally, a veranda continuing as terrace. A tree-trunk staircase connects the veranda with the yard.

The building materials are wood and bamboo, woven flattened bamboo for the floor of the raised platform, and palm leaves for the thatched roof. The central posts reach above the ridge. Most of the furniture—large log drum, rice pounding table, rice drying table, beds and stools—is made from one piece of wood. A chief's house is larger and has woodcarvings on the central post(s) in the common room. For the chief's house and the *morung* the floor cover pattern is 1 over 2, and for the ordinary house it is 1 over 1.

The dormitories (*morung*) are built like houses. The front part, containing the entrance and the place for the log drum, is on the ground and in open connection with the back part on a raised platform with a common sitting place and a large fireplace. At the backside is a pigsty, which is also a toilet. *Morung*s are for boys only, but girls have their dormitory in a widow's house or, if from chief's class, in the chief's house.

Commentary

In Khonsa, the district headquarters, a young Wancho man came to us and said, 'I'm studying at Khonsa College for my B.A. After that, I have to go to Dibrugarh University (in Assam). At this moment we have a meeting to choose a deputy for the General Arunachal Students Conference in Itanagar.' Hearing this, I realised that even people in an isolated village could have lots of contact with the outside world.

Later in the museum library we met a very nice and intelligent Wancho man named Mr Wangsu, who was the schoolteacher in Senua, a Wancho village near Longding. He spoke English and knew a lot about Wancho culture. 'I just borrowed P. Dutta's book *The Wanchos* from the library,' he told me. 'But it contains a lot of mistakes. I want to read it critically, identify the mistakes and write a commentary.'

After introducing us to the Research Officer, Mr Wangsu and the officer showed us around along the collection of tribal art, clothes and objects in the museum. Only the tribal architecture again was poorly presented, which I mentioned in the guestbook, asking the authorities to pay more attention to this subject.

We discussed the dormitory system and chief's house in general. The latter was particularly large because the chief had, in addition to one or two wives, sometimes twenty or more concubines. All of them lived under the same roof in a longhouse, each woman with her own cooking fire. If the chief took more concubines, he just made his house longer. I wondered how this would be possible if the house stood with its axis in the direction of the slope, because each extension would then stand higher on poles. But the houses seemed to stand transverse to the slope.

Wancho houses, like Garo houses, had a front part at ground level and a back part on a raised platform. Nocte houses, by contrast, stood fully on a raised platform.

On our way to Longding, Mr Wangsu, who we offered to take with us, brought his first TV. As we crossed the Tissa River, he said, 'Here starts the Wancho area. Up to the river, we were still in the Nocte area.' Seeing smoke rising from the land, he continued, 'After burning the forests, the first-year millet is grown and the second-year rice (dry-rice cultivation). After sowing, the rain has to come. People believe

that without smoke, no rain will come. At the moment tapioca is harvested and then dried, like these white roots spread out on the terraces.'

After arriving in Longding, our driver took Mr Wangsu home to Senua. When Sushil returned, he told us, 'When passing the bus stop a group of men were waiting for Mr Wangsu. They jumped into the car, over the backbench and squatted in the luggage space, with four others sitting on the backbench. They sat there nicely, all of them with glittering knifes in their hands.'

Along a steep path the next morning we walked into the Wancho village of Senua. Mr Wangsu was waiting for us and showed us his small house where he lived with his wife and children. His house and the little school, which stood opposite, were the only modern buildings in the village, made of stone and using corrugated metal roofing.

Looking around, we saw that Senua was a very special village, with these oblong houses standing half on the ground and half on poles that supported a platform. The part on the ground ended in a half circle, where the entrance was. Looking up, I saw projections on the roofs, at the upper ends of the central columns, which extended about one metre above the ridge. They were covered with palm leaves and some were shaped like human figures (P. 193).

Mr Wangsu introduced us to the chief, who would show us the dormitory (*morung*) for young men. 'The girls don't sleep in a common *morung*,' the chief said, 'but in a separate part of a house of a girl in a wealthy family.' He added, 'In total there are 18 *morung*s in Senua, one for each quarter or neighbourhood, and they differ in size depending on the quarter.'

The one we saw was small, but still 6 × 13 metres, and had been built on two levels, following the same principle as a house (D. 101 and P. 193). When we entered through the main entrance in the half-circular front part, the chief showed us the marvellous log drum standing near the left wall and at the other side the small sleeping room with fireplace and sleeping benches. A few steps led to the back part with, on the raised platform, a common space and a big fireplace at the right corner. Making my drawing, I saw a small door at the back side with tree-trunk stairs as a connection to the pigsty and toilet.

The high floor was made of flattened bamboo, woven in a pattern of 1 over 2 (see detail in D. 101), which was only used for the chief, his relatives and the dormitory. The pattern of 1 over 1 (see detail in D. 101) was for the houses of common people. The walls were also made of woven, flattened bamboo, and Mr Wangsu explained that 'in former days we made them by putting bamboo poles upright and close together in a row, a better defence against enemies from neighbouring villages and also from Wanchos. The villages fought because of feuds and border conflicts.'

We were lucky to see that two houses were being built in the village. The columns of one house had already been driven into the ground, and they had started to make the roof construction. The other house was nearly finished, and they were busy covering the roof.

At the first of these two houses a lot of men and women were working hard (P. 196). The central posts were standing, the ridge beam and the roof beams over the side columns were in place, and the first rafters had been laid. The workers were cutting the beams, materials were being supplied and connections were made with rattan or split bamboo.

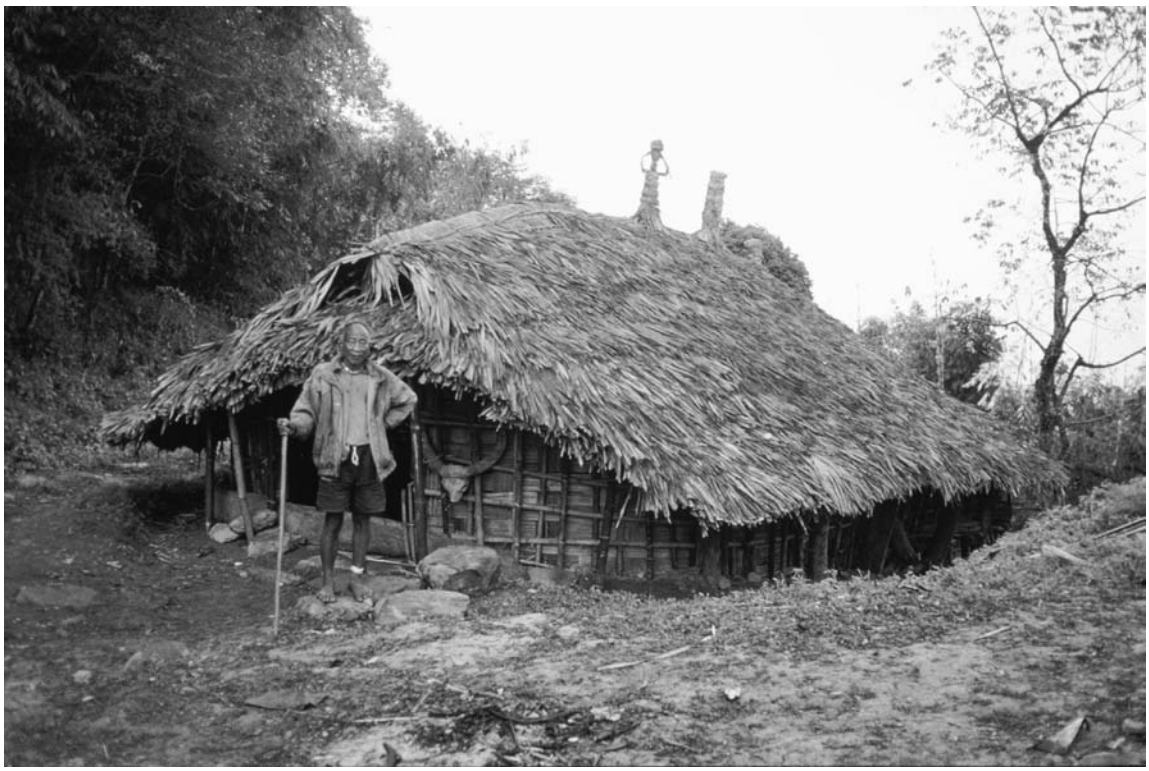
On the ground others were busy tying palm leaves between split bamboos. This is how they made prefabricated bundles of roof cover that could be laid on the roof, overlapping each other, in a simple and fast way.

At the second, nearly finished house a lot of people were also working—more women than at the first house. Outside a fire was burning. Men on the roof were busy laying the last bundles of roof cover and then making the ridge cover and the decorations at the top of the central columns (P. 197 and P. 198). These were very beautifully made as human figures. Inside the house, men were busy making racks and using temporary bamboo scaffolding to hang them above the future fireplaces.

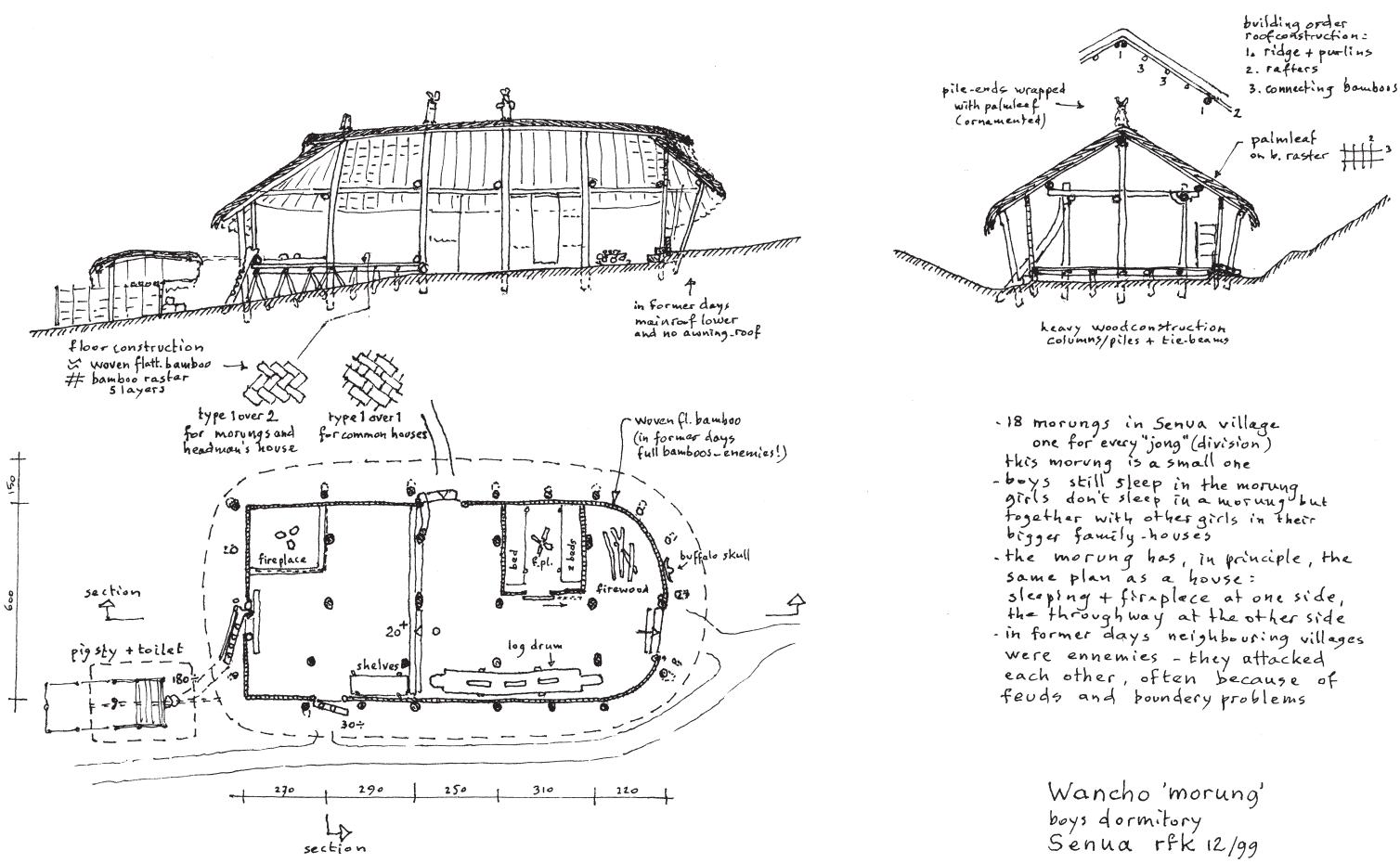
We were invited to enter the house of the chief, which was huge, measuring 10 × 35 metres (D. 103, P. 195, P. 199 and P. 201). A bit more than half of the house, the part with entry and women's compartment with sleeping rooms, was built on ground level. The other part, the space for living and reception, was built on a raised platform and was connected to the outside terrace.

This chief, 'or king,' had two wives, or 'queens,' some people said, and three concubines. The oldest son had one wife and children and five concubines. All lived together in this house, though each wife or concubine had her own small 'house' in the big house. The other sons of the chief lived in another house.

In the entry hall stood a very special rice pounding table nearly eight metres long, with eight holes and eight legs, all carved out of one piece of wood. At the other side stood an impressive split drum about six

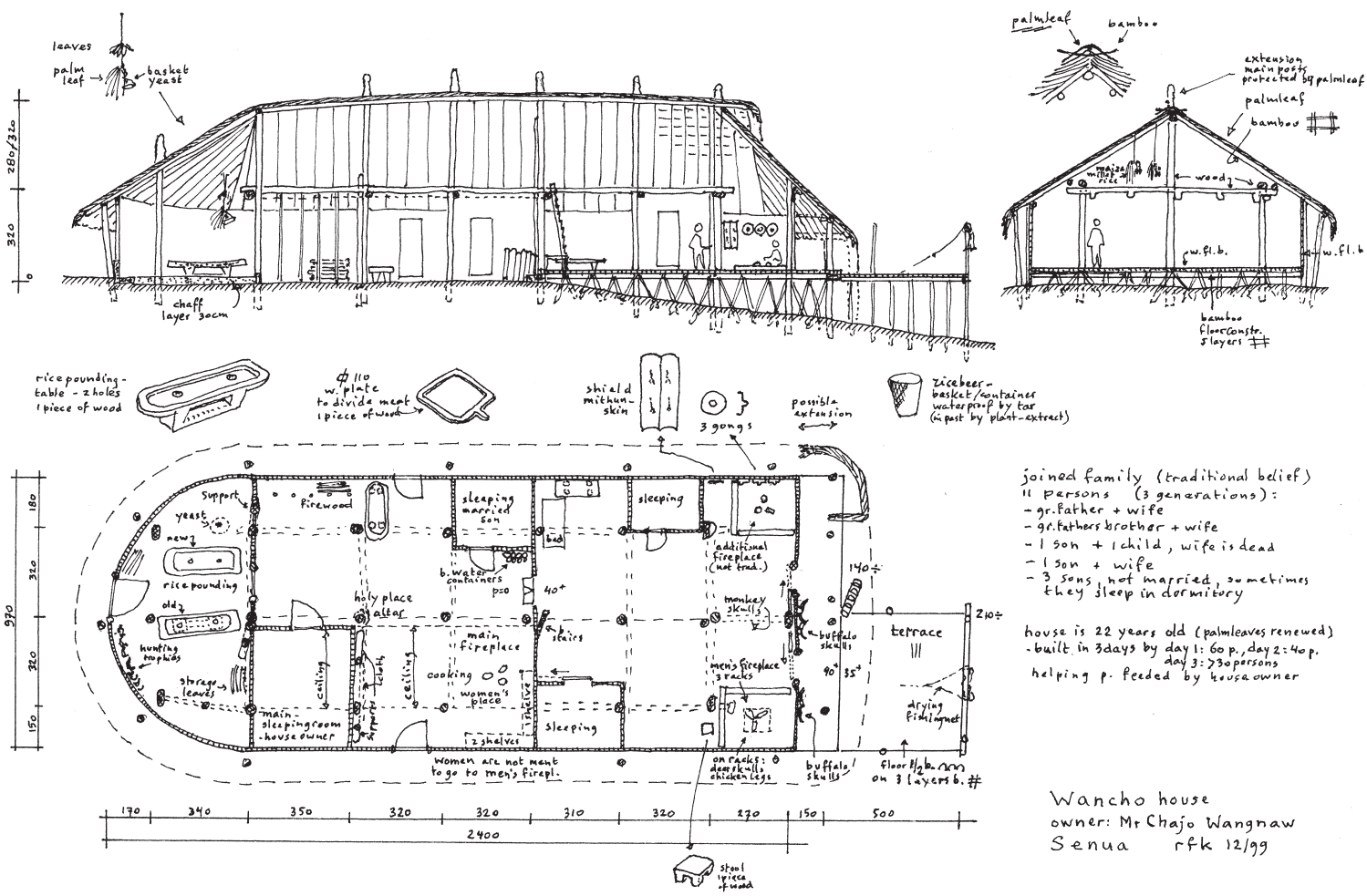


P. 193: Wancho male dormitory (*morung*) in D. 101, Senua, 1999.



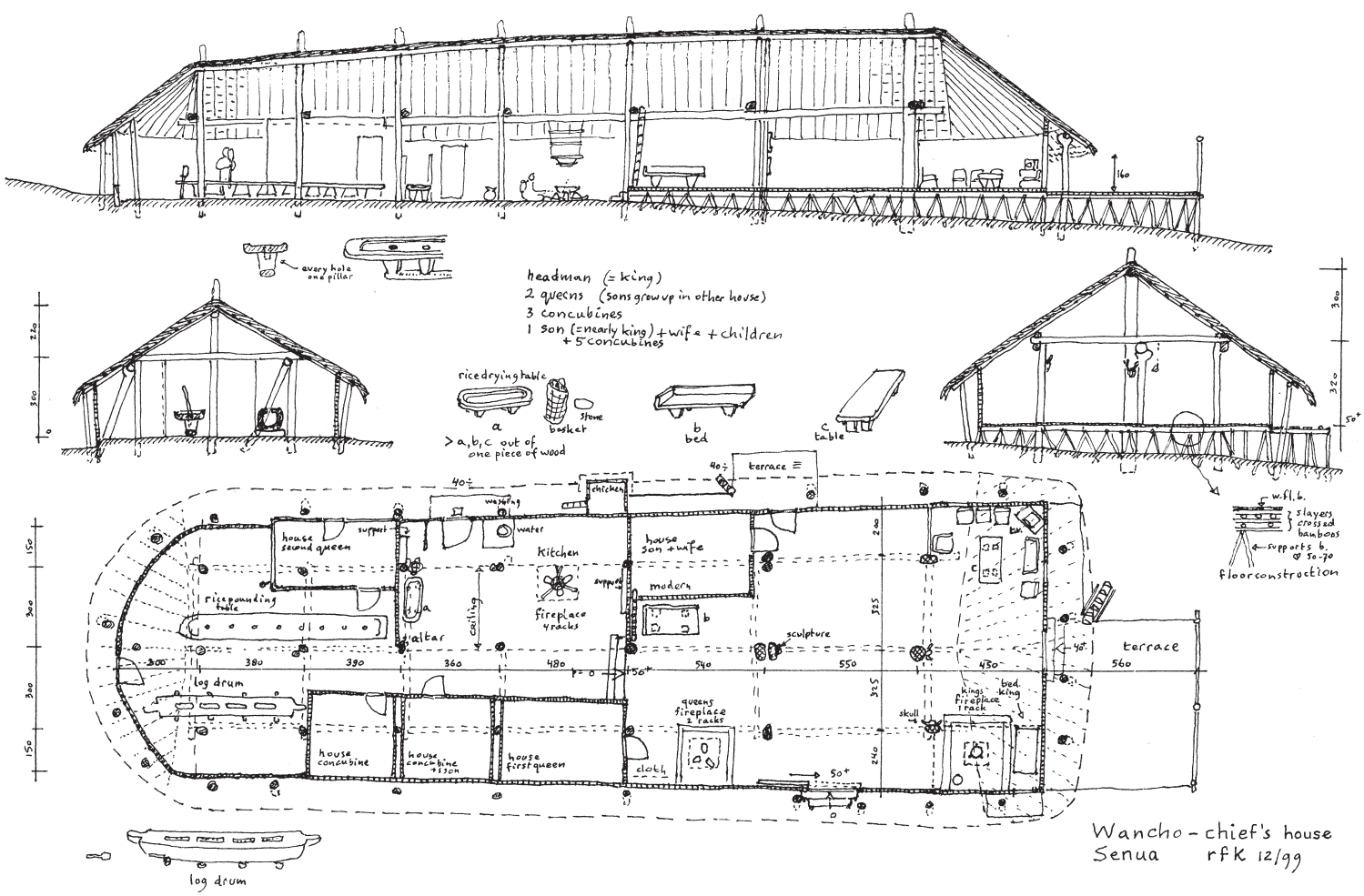
D. 101: Wancho male dormitory (*morung*), Senua – plan, sections and details.

P. 194: Wancho house in D. 102, Senua, 1999.



D. 102: Wancho house, Senua – plan, sections, details and wooden objects.

P. 195: Wancho chief's house in D. 103, Senua, 1999.



D. 103: Wancho chief's house, Senua – plan, sections, detail and wooden objects.

P. 196: making roof construction of new Wancho house, Senua, 1999.

P. 197: roof covering of another new Wancho house, Senua, 1999.

P. 198: decorating ends of central columns of new Wancho house, Senua in P. 197, 1999.

P. 199: decorated ends of central columns, chief's house in D. 103, Senua, 1999.

P. 200: plaited ridge cover and decorated end of central column, Wancho house, Senua, 1999.

metres long and also made out of one piece. There were some more pieces of furniture made from a single piece of wood: a rice-drying table, beds, benches, stools and such like.

The chief showed us his own fireplace and bed, and the fireplace of his first wife. For the eldest son and his wife there was a separate room. The modern sitting corner was quite a funny example of the combination of tradition and modernity. Chairs stood around a traditional saloon table with top and legs made out of one piece, while obliquely in the corner a small T.V. sat on a small table. All this was opposite the traditional fireplace of the chief, or 'the king.'

After drinking tea at Mr Wangsu's house and meeting his nice wife and one of his three children, a little son of two years, our driver helped him to install his TV by placing the antenna on a tall bamboo pole. The television worked but just one channel was available. After the chief, he, the school teacher, was now the second TV owner in the village.

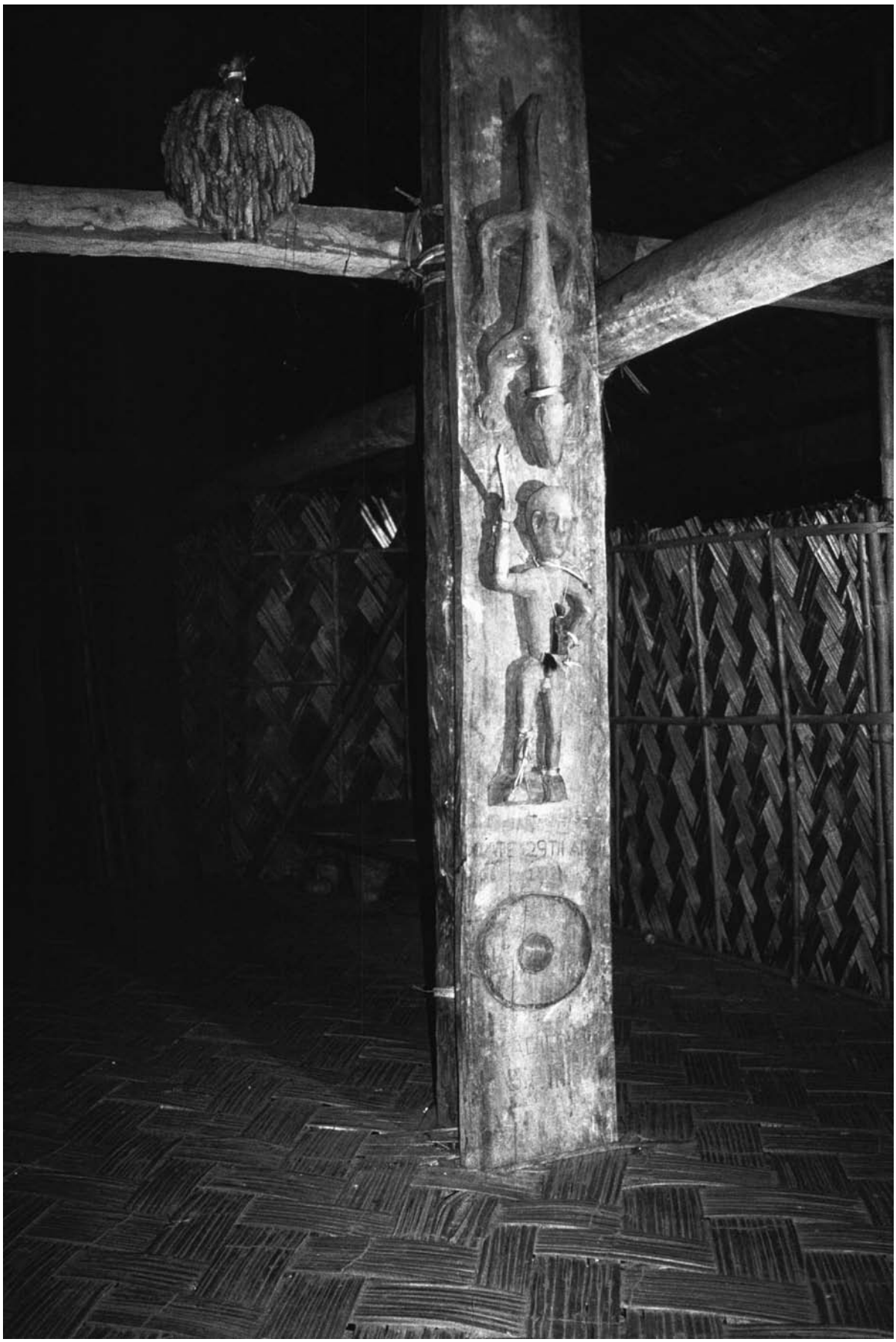
We then visited an ordinary house, owned by Mr Wangnaw, with a joint-family (D. 102, P. 194 and P. 200). In essence, the ground plan was the same as the chief's house and the dormitory: part on ground level, part on a raised platform and entry with the half-circular end.

Mr Wangnaw said, 'We have just made a new rice pounding table. You can see the old one is still there, and you can see how the holes are worn so deeply that you pound through the bottom.' The whole floor was here covered with a layer of rice husks at least 30 centimetres deep.

From the other wives' compartment with a cooking fire we went up two steps to the raised platform of the living room with the men's fireplace. Near a second fireplace, a leather shield and three gongs hung from the wall. Mr Wangnaw showed us a special basket which was used for making rice beer. The basket was made waterproof by an inside layer of pitch, whereas in earlier days a special plant extract had been used. Rice beer was made here in a different way, they told us. 'The rice is cooked, then spread out and mixed with yeast. We let it ferment in the basket, and the dripping liquid is collected.' The rice was not rinsed with water.

The rice beer tasted wonderful. A bit fruity, like pineapple, it was much stronger than we were used to with other rice beer. Also we got to try tapioca, a white paste with fibres, which tasted sweet and sour, but tasty. If you eat too much, it gets you drunk, they said.

As we walked again through the village along paths between the houses, two older women carrying baskets on their backs stood stock-still when they saw us. They were afraid and behaved submissively. Both women had short hair and, we were told, were low status, since women of higher classes wore long hair.



P. 201: wood carvings of central column, chief's house in D. 103, Senua, 1999.

CONCLUSIONS

Architectural Features and House-types

The ethnic groups documented in this book draw on a common pool of architectural features to build a house. This pool includes the following core features:

- use (house for one family or many families, longhouse, chief's house)
- shape of roof (ridged, hipped) and façade (stone, wood, bamboo, open with verandas)
- spatial relation with the surrounding world (veranda, terrace)
- ground plan (rectangular, square or L-shaped)
- partition (open or compartments)
- height (one or more layers)
- number and placement of fireplaces
- foundation (piles, earthen plinth or combination)
- building materials (wood, bamboo, cane, stone); taboo on iron

Other, more secondary elements include:

- type and placement of steps
- type of joins
- placement of ritual spaces
- type, number and placement of columns
- decorative carving on roofs, columns and lintels
- floor and roof covering
- separately founded pounding mortar on platform

Some of these secondary features are more specific and found among only a few tribes:

- patterns of woven, flattened bamboo floor cover that reflect status (Nocte, Wancho)
- woven ridge covering with palm leaves (Wancho, Nocte)
- veranda benches connecting inside and outside space (Galo,Tagin, Hill Miri])
- ornaments on roof top (Nocte, Wancho)

From this broad repertoire of core and secondary features, each group selects certain elements and combines them in various ways to build a house. The resulting 34 traditional house-types are all different, even if differences appear minor, such as the placement of a terrace (see CD. 1 and CD. 2).[1]

No local person, for example, would mistake a Karbi house (with its terrace in the middle) for a Khampti house (with a back terrace). Houses have been built for generations in a particular way. Apatanis build theirs with front and back terraces. Hrussos include a guest room at the front. Galos put a veranda with benches all around their central room. Naga groups (Zeme, Wancho, Nocte) indicate social status by house size. Nevertheless, despite this individuality, we can isolate six basic house-types in the region:

1. rectangular longhouse on piles (Hrusso, Miji, Idu Mishmi, Digaru Mishmi, Miju Mishmi, Mishing, Nyishi)
2. rectangular one-family house on piles (Adi Minyong, Adi Pasi, Adi Padam, Adi Pangi, Adi Ashing, Adi Karko, Adi Shimong, Apatani, Hill Miri, Karbi, Khamba, Khampti, Memba, Nocte, Singpho, Sulung, Tangsa)
3. square one-family house on piles, with surrounding veranda (Galo, Tagin)
4. rectangular one-family house partly on earthen plinth and piles (Garo, Wancho)
5. rectangular one-family wooden house on earthen plinth (Zeme Naga, Khasi, Jaintia, Hill Tiwa)
6. rectangular one-family house with stone walls (Monpa) or lower stone wall (Sherdukpen)

Architecture, Culture and Environment

Tribal houses in northeast India, however, are not simply an assemblage of architectural features. As mentioned in the Introduction, and like buildings everywhere, these houses both represent and reproduce culture. Kinship, type of family unit (or household), social hierarchy, gender, age and generation can all affect the spatial design and use of a house. At the same time, the house can reinforce these cultural traits.

In particular, houses in tribal northeast India are identity markers. By showing who is included in the group and who is not, they reinforce people's sense of who they are and who belongs to them. Houses are not the only objects that mark identity in the

[1] Not included in this total of 34 traditional house-types are the houses of Buguns and Dimasa Cacharis (both modernised at the time of research) and Bangnis (not fully documented).

region—hats and textiles, to name just two others, also play that role—but houses are the most prominent and the most complex.

The link between architecture and identity is also more stable than with other items of material culture. Today textiles cross ethnic boundaries, as Nyishi women wear Adi skirts, but house-types are not so easily borrowed. At the same time that they mark group membership, houses are also highly personal. Most people do not make the hats or the shawls they wear, but nearly all adult men and women help to make the house they live in.

A similarly reciprocal dynamic connects houses and the environment. Factors such as climate, topography, altitude and available natural products (trees, plants, etc.) influence the house-types documented in this book. And, in turn, those houses have an effect on the physical setting, including land use and cultivation; certain types of bamboo, for instance, may be grown because they are needed to build houses.

One example of this process, in which environment seems to have directly affected the type of house and therefore the family unit, is the Apatani house-type. The limited amount of arable land in the Apatani valley means that Apatanis build small, nuclear or one-family houses on the higher ground in the valley between the paddy fields and rising mountains. These small houses are also placed close to each other, in order to maximise the amount of fertile land available for agriculture, primarily wet-rice cultivation. Their neighbours, the Nyishis, on the other hand, build longhouses on sparsely populated mountain tops or ridges, where space is more or less unlimited. These large houses contain several family units, whose dozens of members form an economic unit.

A different kind of unlimited space, this time flat, is found in the broad flood plain of the Brahmaputra Valley in Assam, where Mishings build enormous houses, including one with 86 people sleeping in it (D. 037). This is a good example of environment and culture influencing house-type: although Mishings are believed to be Hill Miris who migrated down from the hills of Arunachal Pradesh, their houses are as different to Hill Miri houses in the interior hills as they are to nearby Assamese houses.

Sometimes, however, the power of the environment overrides culture and disconnects the link between architecture and identity. A Garo family in Garampani (eastern Meghalaya), for example, chose not to build a Garo platform house due to the lack of wood in the area and probably because they lived far from the Garo area (D. 010). They chose instead the Assamese house-type, with very light construction on a mud plinth. In two other cases, a Karbi family built their house on an earthen plinth (again in Assamese style) rather than on the traditional platform because wood was too expensive (D. 021 and also D. 022).

Change

Finally, beyond local culture and environment, wider forces of economic, technological and political change affect the way houses are built in tribal northeast India. Throughout this book, we have noted several of these changes:

- longhouses are shortened
- multi-family occupation is decreasing
- bedrooms are separated from the living room.
- corrugated iron is used when re-roofing.
- dormitories are used as a general community hall
- ban on use of iron is not always observed
- addition of a 'modern' section, or building a modern house with a traditional part (kitchen, terrace)

These changes, evident already in the 1990s, have accelerated during the past few decades as part of a deeper shift from traditional tribal life to mainstream life in the Indian nation state. New roads and schools are 'pulling' people down from the mountain slopes to lower elevations, where towns are growing and employment opportunities are expanding.

These developments connect mountainous tribal communities with the region and the rest of India. While tribal groups in northeast India were never as sedentary or isolated as some might think—trade, migration and kin networks ensured movement—the nature, scope and reach of these new links are unprecedented. Young people take jobs in towns in Assam; some go to college and university in Gauhati, Shillong and New Delhi. People in remote villages use mobile phones and computers to communicate with others in the next valley and around the world.

Even with these changes, most houses in tribal northeast India continue to follow long-established models so that the different types of houses are instantly recognisable. Although corrugated iron roofs are now visible everywhere, the basic house-plans have remained fairly stable. Seeing those traditional buildings, with their distinctive shape and features, one knows to what group it belongs.

Given the rapid pace of change, these house-plans will certainly alter, and perhaps sooner than later. How that development will affect the relationship between architecture and culture is a question that the documentation presented in this book should help answer.

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